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                 BEILSTEIN adds new search fields
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                 Nutraceuticals International (NUTRACEUT) now available on STN
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         Nov 18
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                 DKILIT has been renamed APOLLIT
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         Nov 25
                 More calculated properties added to REGISTRY
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         Dec 04
                 CSA files on STN
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                 PCTFULL now covers WP/PCT Applications from 1978 to date
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         Dec 17
                 TOXCENTER enhanced with additional content
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                 Adis Clinical Trials Insight now available on STN
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                 Simultaneous left and right truncation added to COMPENDEX,
                 ENERGY, INSPEC
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                 CANCERLIT is no longer being updated
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         Feb 24 METADEX enhancements
NEWS 22
         Feb 24
                 PCTGEN now available on STN
NEWS 23
         Feb 24
                 TEMA now available on STN
NEWS 24
         Feb 26
                 NTIS now allows simultaneous left and right truncation
                 PCTFULL now contains images
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         Feb 26
NEWS 26
         Mar 04
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         Mar 20
                 EVENTLINE will be removed from STN
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         Mar 24
                 PATDPAFULL now available on STN
NEWS 29
         Mar 24
                 Additional information for trade-named substances without
                 structures available in REGISTRY
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                 Display formats in DGENE enhanced
         Apr 11
NEWS 31
                 MEDLINE Reload
         Apr 14
NEWS 32
         Apr 17
                 Polymer searching in REGISTRY enhanced
NEWS 33
         Apr 21
                 Indexing from 1947 to 1956 being added to records in CA/CAPLUS
NEWS 34
         Apr 21
                 New current-awareness alert (SDI) frequency in
                 ·WPIDS/WPINDEX/WPIX
NEWS 35
         Apr 28
                 RDISCLOSURE now available on STN
         May 05
NEWS 36
                 Pharmacokinetic information and systematic chemical names
                 added to PHAR
NEWS 37
         May 15
                 MEDLINE file segment of TOXCENTER reloaded
NEWS 38
         May 15
                 Supporter information for ENCOMPPAT and ENCOMPLIT updated
NEWS 39
         May 16
                 CHEMREACT will be removed from STN
NEWS 40
         May 19
                 Simultaneous left and right truncation added to WSCA
NEWS 41
         May 19
                 RAPRA enhanced with new search field, simultaneous left and
                 right truncation
NEWS 42
         Jun 06
                 Simultaneous left and right truncation added to CBNB
NEWS 43
         Jun 06
                PASCAL enhanced with additional data
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10/ 075,073

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Uploading 10075073.str

L1 STRUCTURE UPLOADED

=> d ll L1 HAS NO ANSWERS L1 STR

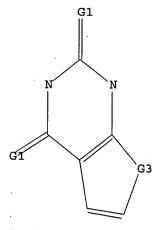
G1 O,S G2 C,O,S,N

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L2 STRUCTURE UPLOADED

=> d 12 L2 HAS NO ANSWERS L2 ST



G1.0,S G2 C,0,S,N G3 0,S,N

Structure attributes must be viewed using STN Express query preparation.

=> s l1 ful FULL SEARCH INITIATED 10:41:12 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 161203 TO ITERATE 100.0% PROCESSED 161203 ITERATIONS

39245 ANSWERS

SEARCH TIME: 00.00.02

39245 SEA SSS FUL L1

=> s 12 ful

FULL SEARCH INITIATED 10:41:25 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 17991 TO ITERATE

100.0% PROCESSED 17991 ITERATIONS 2845 ANSWERS

298.11

SEARCH TIME: 00.00.01

L4 2845 SEA SSS FUL L2

=> file caplus

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FILE COVERS 1907 - 7 Jun 2003 VOL 138 ISS 24 FILE LAST UPDATED: 6 Jun 2003 (20030606/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13

L5 55566 L3

=> s 14

306 L4

=> s 13/biol

55566 L3

5427635 BIOL/RL

L7 34683 L3/BIOL

(I.3 (I.) BIOL/RL)

=> s 14/biol

306 L4

5427635 BIOL/RL

90 L4/BIOL

(L4 (L) BIOL/RL)

=> d 18 1- ibib abs fhitstr YOU HAVE REQUESTED DATA FROM 90 ANSWERS - CONTINUE? Y/(N):y ANSWER 1 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2003:117829 CAPLUS

DOCUMENT NUMBER: 138:153549

TITLE: Preparation of thieno[2,3-d]pyrimidinediones and their

use in the modulation of autoimmune disease

INVENTOR(S): Reynolds, Rachel Heulwen; Ingall, Anthony Howard;

Rasul, Rukhsana Tasneem; Guile, Simon David; Cooper,

Martin Edward

PATENT ASSIGNEE(S): Astrazeneca AB, Swed.; Astrazeneca UK Limited

PCT Int. Appl., 148 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA'	PATENT NO. KI				ND DATE				APPLICATION NO.				٥.	DATE			
									-								
WO	2003	0118	68	A	1	2003	0213		W	20	02-G	B339	9	2002	0724		
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	ΜÀ,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,
		UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZM,	ZW,	AM,	AZ,	BY,	KG,	KZ,	MD,	RU,
		TJ,	TM														
	RW:	GH,	GM,	KΕ,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑT,	BE,	BG,
		CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,
	•	PT,	SE,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,
		NE,	SN,	TD,	TG												/
PRIORIT	APP	LN.	INFO	. :				(GB 20	001-	1847	9	Α	2001	0728	1.	100
OTHER SOURCE(S):					GB 2001-18479 A 20010728 / MARPAT 138:153549							\mathcal{C}					
GI																	

Ι

AB The invention relates to thieno[2,3-d]pyrimidinediones (shown as I; variables defined below; e.g. (S)-5-(4-hydroxyisoxazolidin-2-ylcarbonyl)-3methyl-1-(isobutyl)-6-(4-quinolinylmethyl)thieno[2,3-d]pyrimidine-2,4(1H,3H)-dione), methods of prepg., pharmaceutical compns. contg. and methods of using I, particularly in the modulation of autoimmune disease. For I: R1 and R2 = C1-6 alkyl, C3-6 alkenyl, C3-6 cycloalkyl C1-3 alkyl or C3-6 cycloalkyl; each of which may be optionally substituted by 1 to 3 halogen atoms; R3 = isoxazolidin-2-ylcarbonyl or tetrahydroisoxazin-2ylcarbonyl wherein each ring is optionally substituted by one hydroxy group; Q is CO- or C(R4)(R5)- (wherein R4 is H or C1-4 alkyl and R5 is H or hydroxy group); Ar = 5- to 10-membered arom. ring system wherein up to 4 ring atoms may be heteroatoms = N, O and S, the ring system being optionally substituted by .gtoreq.1 substituents as defined in the specification. In tests of inhibition of phorbol myristate acetate

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(PMA)/ionomycin-stimulated peripheral blood mononuclear cell proliferation, IA50 values for I were < 1 .times. 10-6 M; e.g. 1.7 .times. 10-10 M for (S)-5-(4-hydroxyisoxazolidin-2-ylcarbonyl)-3-methyl-1-(isobuty1)-6-(4-quinolinylmethy1)thieno[2,3-d]pyrimidine-2,4(1H,3H)-dione and 5 .times. 10-9 for (S)-5-(4-hydroxyisoxazolidin-2-ylcarbonyl)-3-methyl-1-(isopropyl)-6-(4-quinolinylmethyl)thieno[2,3-d]pyrimidine-2,4(1H,3H)dione. More than 40 examples of prepn. of I are included. For example, 136 mg of (S)-5-(4-hydroxyisoxazolidin-2-ylcarbonyl)-3-methyl-1-(isobutyl)-6-(4-quinolinylmethyl)thieno[2,3-d]pyrimidine-2,4(1H,3H)-dione was prepd. by adding to a suspension of sodium 1,2,3,4-tetrahydro-3-methyl-1-(isobutyl) -2,4-dioxo-6-(4-quinolinylmethyl)thieno[2,3-d]pyrimidine-5carboxylate (157 mg) in CH2Cl2 (5 mL) 1-hydroxybenzotriazole hydrate (108 mg), stirring the mixt. for 15 min, adding 1-ethyl-3-(3'dimethylaminopropyl)carbodiimide hydrochloride (135 mg), stirring for 1 h, adding (S)-4-isoxazolidinol hydrochloride (69 mg) and NEt3 (147 .mu.L), stirring the reaction mixt. for 18 h concg. under reduced pressure, and purifying by column chromatog. Prepn. of reactant sodium 1,2,3,4-tetrahydro-3-methyl-1-(isobutyl)-2,4-dioxo-6-(4quinolinylmethyl)thieno[2,3-d]pyrimidine-5-carboxylate from N-hydroxyphthalimide and (R)-(+)-epichlorohydrin via intermediates 2-(4-hydroxyisoxazolidin-2-yl)carbonylbenzoate, (S)-4-isoxazolidinol hydrochloride, Et 1,2,3,4-tetrahydro-3-methyl-1-(isobutyl)-2,4dioxothieno[2,3-d]pyrimidine-5-carboxylate, 1,2,3,4-tetrahydro-6-[hydroxy(4-quinolinyl)methyl]-3-methyl-1-(isobutyl)-2,4-dioxothieno[2,3d]pyrimidine-5-carboxylate and 1,2,3,4-tetrahydro-3-methyl-1-(isobutyl)-2,4-dioxo-6-(4-quinolinylmethyl)thieno[2,3-d]pyrimidine-5-carboxylate are also described. **496791-37-8P**, (S)-6-[(3,5-Dimethyl-1H-pyrazol-4-yl)methyl]-5-[(4hydroxyisoxazolidin-2-yl)carbonyl]-1-isobutyl-3-methylthieno[2,3d]pyrimidine-2,4(1H,3H)-dione RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (drug candidate; prepn. of thienopyrimidinediones and their use in modulation of autoimmune diseases) CAPLUS 496791-37-8 4-Isoxazolidinol, 2-[[6-[(3,5-dimethyl-1H-pyrazol-4-yl)methyl]-1,2,3,4-

tetrahydro-3-methyl-1-(2-methylpropyl)-2,4-dioxothieno[2,3-d]pyrimidin-5-

Absolute stereochemistry.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 90 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2003:76788 CAPLUS DOCUMENT NUMBER: 138:122656

yl]carbonyl]-, (4S)- (9CI) (CA INDEX NAME)

TITLE:

Preparation of thieno[2,3-d]pyrimidinediones as

immunosuppressants for treatment of obstructive airway

INVENTOR(S):

PATENT ASSIGNEE(S): SOURCE:

Reynolds, Rachel Heulwen; Ingall, Anthony Howard Astrazeneca Ab, Swed.; Astrazeneca Uk Limited

PCT Int. Appl., 95 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. APPLICATION NO. KIND DATE DATE ------------WO 2003008422 Α1 20030130 WO 2002-GB3250 20020716 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

GB 2001-17583

20010719

ΙI

PRIORITY APPLN. INFO.:

Ι

OTHER SOURCE(S): GI

MARPAT 138:122656

$$R^2$$
 N
 Q
 Q
 Q

R1

AB

Title compds. I [wherein R1 and R2 = independently (halo)alkyl, (halo)alkenyl, or (halo)cycloalkyl(alkyl); R3 = CONR10YR11 or SO2NR10YR11; Y = O, S, or NR12; R10 and R11 = independently (un)substituted alkyl; R12 = H or alkyl; Q = CO or CR4R5; R4 = H or alkyl; R5 = H or OH; Ar = COM(un) substituted 5-10 membered (hetero) arom. ring; or pharmaceutically acceptable salts or prodrugs thereof] were prepd. as T cell proliferation inhibitors. For example, 6-mercapto-3-methyl-1-(2-methylpropyl)pyrimidine-2,4(1H,3H)-dione was reacted with Et bromopyruvate in the presence of K2CO3 to give Et 1,2,3,4-tetrahydro-3-methyl-1-(2-methylpropyl)-2,4dioxothieno[2,3-d]pyrimidine-5-carboxylate. Treatment with lithium diisopropylamide in THF and addn. of 4-quinolinecarboxaldehyde afforded 6-substituted thienopyrimidinedione. Redn. with trifluoroacetic anhydride, sapon. with 1M NaOH, and amidation with N,Odimethylhydroxylamine.bul.HCl provided II. In a phorbol 12-myristate 13-acetate (PMA)/ionomycin-stimulated peripheral blood mononuclear cell

CN

(PBMC) proliferation assay, the latter exhibited an IA50 of $5.88 \times 10-9 \text{ M}.$ I are useful as immunosuppressants for treatment of obstructive airway disease and other autoimmune diseases.

IT 491615-50-0P, Methyl 4-[[1,2,3,4-tetrahydro-5-[(N-methoxy-Nmethylamino)carbonyl]-3-methyl-1-(2-methylpropyl)-2,4-dioxothieno[2,3d]pyrimidin-6-yl](hydroxy)methyl]-1-methyl-1H-pyrrole-2-carboxylate RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (immunosuppressant; prepn. of thieno[2,3-d]pyrimidinedione immunosuppressants by reacting mercaptopyrimidinediones with bromopyruvates or bromooxobutanoates)

RN 491615-50-0 CAPLUS

1H-Pyrrole-2-carboxylic acid, 4-[hydroxy[1,2,3,4-tetrahydro-5-[(methoxymethylamino)carbonyl]-3-methyl-1-(2-methylpropyl)-2,4dioxothieno[2,3-d]pyrimidin-6-yl]methyl]-1-methyl-, methyl ester (9CI) (CA INDEX NAME)

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

2

ANSWER 3 OF 90 COPYRIGHT 2003 ACS CAPLUS ACCESSION NUMBER: 2003:13467 CAPLUS

DOCUMENT NUMBER:

REFERENCE COUNT:

138:184210

TITLE:

Rigidins B-D, new pyrrolopyrimidine alkaloids from a

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS

tunicate Cystodytes species

AUTHOR (S):

Tsuda, Masashi; Nozawa, Kohei; Shimbo, Kazutaka;

CORPORATE SOURCE:

Kobayashi, Jun'ichi Graduate School of Pharmaceutical Sciences, Hokkaido

University, Sapporo, 060-0812, Japan

SOURCE:

Journal of Natural Products (2003), 66(2), 292-294

CODEN: JNPRDF; ISSN: 0163-3864

PUBLISHER:

American Chemical Society

DOCUMENT TYPE:

Journal

LANGUAGE:

English

GI

Three new pyrrolopyrimidine alkaloids, rigidins B-D (e.g. I, rigidin B), AB have been isolated from an Okinawan marine tunicate Cystodytes sp., and the structures were elucidated on the basis of spectroscopic data.

IT 132160-44-2, Rigidin

RL: BSU (Biological study, unclassified); BIOL (Biological study) ; BIOL (Biological study)

(pyrrolopyrimidine alkaloids from tunicate Cystodytes species)

RN 132160-44-2 CAPLUS

1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-(4-hydroxybenzoy1)-5-(4-CN hydroxyphenyl) - (9CI) (CA INDEX NAME)

6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2002:898393 CAPLUS

DOCUMENT NUMBER:

138:66168

TITLE:

Discovery of a Thieno[2,3-d]pyrimidine-2,4-dione Bearing a p-Methoxyureidophenyl Moiety at the 6-Position: A Highly Potent and Orally Bioavailable Non-Peptide Antagonist for the Human Luteinizing

Hormone-Releasing Hormone Receptor

AUTHOR (S):

Sasaki, Satoshi; Cho, Nobuo; Nara, Yoshi; Harada, Masataka; Endo, Satoshi; Suzuki, Nobuhiro; Furuya,

Shuichi; Fujino, Masahiko

CORPORATE SOURCE:

Pharmaceutical Research Division, Takeda Chemical

Industries Ltd., Ibaraki, 300-4293, Japan

SOURCE:

Journal of Medicinal Chemistry (2003), 46(1), 113-124

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: DOCUMENT TYPE: American Chemical Society

Journal

LANGUAGE:

English

GI

AB We have previously disclosed the first potent and orally effective non-peptide antagonist for the human LH-releasing hormone (LHRH) receptor, a thieno[2,3-b]pyridin-4-one deriv., T-98475. Extensive research on developing non-peptide LHRH antagonists has been carried out by employing a strategy of replacing the thienopyridin-4-one nucleus with other heterocyclic surrogates. We describe herein the design and synthesis of a series of thieno[2,3-d]pyrimidine-2,4-dione derivs. contg. a biaryl moiety, which led to the discovery of a highly potent and orally active non-peptide LHRH antagonist, 5-(N-benzyl-N-methylaminomethyl)-1-(2,6difluorobenzyl)-6-[4-(3-methoxyureido)phenyl]-3-phenylthieno[2,3d]pyrimidine-2,4(1H,3H)-dione (I: TAK-013). Compd. I showed high binding affinity and potent in vitro antagonistic activity for the human receptor with half-maximal inhibition concn. (IC50) values of 0.1 and 0.06 nM, resp. Oral administration of I caused almost complete suppression of the plasma LH levels in castrated male cynomolgus monkeys at a 30 mg/kg dose with sufficient duration of action (more than 24 h). The results demonstrated that the thienopyrimidine-2,4-dione core is an excellent surrogate for the thienopyridin-4-one and that thienopyrimidine-2,4-diones and thienopyridin-4-ones constitute a new class of potent and orally bioavailable LHRH receptor antagonists. Furthermore, mol. modeling studies indicate that the unique methoxyurea side chain of I preferentially forms an intramol. hydrogen bond between the aniline NH and the methoxy oxygen The hydrogen bond will shield the hydrogen bonding moieties from the solvent and reduce the desolvation energy cost. It is therefore speculated that the intramol. hydrogen bond resulting from judicious incorporation of an oxygen atom into the terminal alkyl group of the urea may increase the apparent lipophilicity to allow increased membrane permeability and consequently to improve the oral absorption of I in monkeys. On the basis of its profile, compd. I has been selected as a candidate for clin. trials and it is expected that it will provide a new class of potential therapeutic agents for the clin. treatment of a variety of sex-hormone-dependent diseases.

IT 181817-21-0P

RN

CN

RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); SPN (Synthetic preparation); BIOL (Biological study); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of methoxyureidophenyl thienopyrimidinediones as LHRH receptor antagonists)

181817-21-0 CAPLUS

Propanamide, N-[4-[1-[(2,6-difluorophenyl)methyl]-1,2,3,4-tetrahydro-5-[[methyl(phenylmethyl)amino]methyl]-2,4-dioxo-3-phenylthieno[2,3-d]pyrimidin-6-yl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} R & \text{Me} \\ & | \\ \text{CH}_2 - \text{N-CH}_2 - \text{Ph} \end{array}$$

REFERENCE COUNT:

THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

CAPLUS COPYRIGHT 2003 ACS ANSWER 5 OF 90

34

ACCESSION NUMBER:

2002:747681 CAPLUS

DOCUMENT NUMBER:

137:273233

TITLE:

PARP inhibitors for treatment of retinal degeneration

or chemotherapy-induced cell injury

INVENTOR(S):

.Tatsuno, Toru; Ikeda, Kazuhito; Aino, Hiroshi; Ogawa,

Hiroki

PATENT ASSIGNEE(S):

Sumitomo Pharmaceutical Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF Patent

DOCUMENT TYPE:

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002284699	A2	20021003	JP 2001-92373	20010328
RIORITY APPLN. INFO.:		JP	2001-92373	20010328
			•	

OTHER SOURCE(S): MARPAT 137:273233

The invention provides an agent for treatment of retinal degeneration related to visual cell degeneration or treatment of chemotherapy-induced cell injury, contg. a poly(ADP-ribose)polymerase (PARP) inhibitor. A compd. 6,7-dihydro-1H,5H-pyrid[3,2,1-ij]quinazoline-1,3(2H)-dione was prepd., and its effect on n-methyl-N-nitrosourea (MNU)-induced retinal degeneration in rats was examd.

IT 53680-91-4

> RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(PARP inhibitors for treatment of retinal degeneration or chemotherapy-induced cell injury)

RN 53680-91-4 CAPLUS

CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 1-ethyl- (9CI) (CA' INDEX

ANSWER 6 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2002:747672 CAPLUS

DOCUMENT NUMBER:

137:294965

TITLE:

Medicinal composition containing aryl or

heteroarylsulfonamide compounds as matrix

metalloproteinase inhibitors

INVENTOR(S):

Kimura, Tomio; Tamaki, Kazuhiko; Miyazaki, Shojiro;

Kurakata, Shinichi; Fujiwara, Kosaku

PATENT ASSIGNEE(S):

Sankyo Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 107 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
		-		
JP 2002284686	A2	20021003	JP 2001-91645	20010328
PRIORITY APPLN. INFO.	:	JP	2001-91645	20010328
OTHER SOURCE(S):	MA	RPAT 137:294965		

GI

$$Q = R^{5}$$

$$-N$$

$$X^{1}$$

$$0$$

$$Q^{1} = X^{3}$$

$$-X^{4}$$

$$X^{2}$$

AB Disclosed is a medicinal compn. contg. aryl or heteroarylsulfonamide deriv. represented by the following general formula R4-M-L-SO2-N(R3)CH(AR2)COR1, pharmacol. acceptable salts, esters, or other derivs. thereof [wherein R1 = OH, (un)protected NHOH; R2 = Q, Q1; wherein X1 = O, CO2, CO-S, CO, S(O)m (m = 0, 1, 2), (un)satd. NH, CH2, or coh2; X2 = O, S, (un) substituted NH or CH2; X3 = N, (un) substituted CH; R3 = H, (un)substituted alkyl, cycloalkyl, alkenyl, or alkynyl; L = (un) substituted arylene or heteroarylene; M = 0, S; R4 = (un) substituted lower alkyl, aryl, or heteroaryl] as the active ingredient. The medicinal compn. is useful as a matrix metalloproteinase inhibitor, in particular matrix metalloproteinase-13 (MMP-13) and/or aggrecanase inhibitor, in the prevention and/or treatment of chronic articular rheumatism, osteoarthritis, metastasis, invasion, or proliferation of cancer, or breast cancer. Thus, Mitsunobu reaction of 2-(2-hydroxyethyl)-N-methyl-N-(4-phenoxybenzenesulfonyl)glycine allyl ester and 3-(2trimethylsilyl)ethoxymethylpyrido[2,3-d]pyrimidine-2,4-dione using Ph3P and di-Et azodicarboxylate in THF at room temp. for 1 h gave N-methyl-N-(4-phenoxybenzenesulfonyl)-2-[2-[3-(2trimethylsilyl)ethoxymethyl-2,4-dioxopyrido[2,3-d]pyrimidin-1-yl]ethyl]glycine allyl ester which was desilylated by treatment with CF3CO2H in CH2Cl2 at room temp. for 3 h and sapond. with a mixt. of 1 N aq. NaOH and THF at room temp. for 30 min, and acidified with 1 N aq. HCl to give N-methyl-N-(4-phenoxybenzenesulfonyl)-2-[2-(2,4-dioxopyrido[2,3-d]pyrimidin-1-yl)ethyl]glycine (I). Amidation of I with hydroxylamine using N,N'-carbonyldiimidazole in a mixt. of CH2Cl2, THF, and H2O gave N-hydroxy-N.alpha.-methyl-N.alpha.-(4-phenoxybenzenesulfonyl)-2-[2-(2,4-dioxopyrido[2,3-d]pyrimidin-1-yl)ethyl]glycinamide (II). II and N-hydroxy-N.alpha.-methyl-N.alpha.-(4-phenoxybenzenesulfonyl)-2-[2-(2,4-dioxoquinazolin-1-yl)ethyl]glycinamide showed IC50 of 0.39 and 0.36 nM, resp., against MMP-13. A powder, a granule, and a tablet formulation contg. the specific title compd. were described.

IT 464216-36-2P

RN

CN

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of aryl or heteroarylsulfonamide derivs. as matrix metalloproteinase inhibitors and medicinal compn. contg. them) 464216-36-2 CAPLUS

Thieno[2,3-d]pyrimidine-1(2H)-butanamide, 3,4-dihydro-N-hydroxy-5-methyl-alpha.-[methyl[(4-phenoxyphenyl)sulfonyl]amino]-2,4-dioxo-(9CI) (CA INDEX NAME)

L8 ANSWER 7 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:637683 CAPLUS

DOCUMENT NUMBER: 137:185504

TITLE: Preparation of thieno[2,3-d]pyrimidindiones as matrix

metalloproteinase inhibitors for treatment of cancer,

rheumatoid arthritis, and osteoarthritis

INVENTOR(S): Harter, William Glen; Li, Jie Jack; Ortwine, Daniel

Fred; Shuler, Kevon Ray; Yue, Wen-song

PATENT ASSIGNEE(S): Warner-Lambert Company, USA

SOURCE: PCT Int. Appl., 278 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. APPLICATION NO. . KIND DATE DATE WO 2002-IB204 WO 2002064598 Α1 20020822 20020118 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG 20030102 US 2003004172 **A1** US 2002-75073 20020213 US 2001-268756P P PRIORITY APPLN. INFO.: 20010214 OTHER SOURCE(S): MARPAT 137:185504 GI

Title fused pyrimidinones I [wherein C2W = 5-membered (hetero)cyclic diradical substituted with ABR3 and optionally substituted with R2; A = CO or SOO-2; B = O or NR5; or AB = C.tplbond.C; R1, R4, and R5 = independently H, alkyl, alkenyl, alkynyl, (CH2)n-(hetero)aryl, (CH2)n-cycloalkyl, (CH2)n-heterocyclyl, or alkanoyl, R2 and R3 = independently H, alkyl, alkenyl, alkynyl CN, NO2, NR4R5, (CH2)n-cycloalkyl, or (CH2)n-(hetero)aryl; or R2 = halo; n = 0-5; or NR4R5= (un)substituted heterocyclyl; with the proviso that R1 and R3 .noteq. both H or alkyl; or pharmaceutically acceptable salts thereof] were prepd. as matrix metalloproteinase (MMP) inhibitors, esp. as selective MMP-13 inhibitors. For example, 3-benzyl-6-chloro-1H-pyrimidine-2,4-dione was coupled with mercaptoacetic acid Et ester using Na2CO3 in EtOH (67%) and the product cyclized with POCl3 in anhyd. DMF to give 3-benzyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid Et ester (95%). Sapon. (96%) followed by esterification with benzyl alc. and 1-cyclohexyl-3-(2-morpholinoethyl)carbodiimide metho-p-toluenesulfonate afforded II (12%). The latter selectively inhibited the hydrolytic activity of MMP-13 (0.61 .mu.M) over MMP-1 (100 .mu.M), MMP-2 (100 .mu.M), MMP-3 (18 .mu.M), MMP-7 (100 .mu.M), MMP-9 (100 .mu.M), MMP-12 (100 .mu.M), and MMP-14 (100 .mu.M) with the indicated IC50 values. I are useful for the treatment of diseases mediated by the MMP-13 enzyme, such as cancer, rheumatoid arthritis, or osteoarthritis (no data). Formulations of I are also disclosed.

IT 448964-75-8P, 3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); BIOL (Biological)

CN

study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (MMP inhibitor; prepn. of thienopyrimidinediones as MMP inhibitors for treatment of cancer, rheumatoid arthritis, and osteoarthritis)

448964-75-8 CAPLUS RN

> Thieno[2,3-d]pyrimidine-6-carboxylic acid, 1,2,3,4-tetrahydro-2,4-dioxo-3-(phenylmethyl) -, phenylmethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & H & O \\ H & S & C-O-CH_2-Ph \\ \hline Ph-CH_2 & O \\ \end{array}$$

3 REFERENCE COUNT: THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 8 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2002:637472 CAPLUS

DOCUMENT NUMBER:

137:201321

TITLE:

Preparation of substituted isophthalic acid

derivatives, multicyclic pyrimidinediones and analogs

thereof as matrix metalloproteinase inhibitors

INVENTOR(S):

Andrianjara, Charles; Ortwine, Daniel Fred; Pavlovsky,

Alexander Gregory; Roark, William Howard

PATENT ASSIGNEE(S):

Warner-Lambert Company, USA

SOURCE:

PCT Int. Appl., 173 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA'	rent :	NO.		KI	ND	DATE			A.	PPLI	CATI	ON NO	o. :	DATE			
									-						- -		
WO	2002	0640	80	A.	2	2002	0822		W	20	02-I	B447		2002	0213		
WO	2002	0640	80	A	3	2002	1212	•									
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GΒ,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	KZ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	ΜA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,
•		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,
		ŲΑ,	UG,	US,	UZ,	VN,	YU,	ZA,	ZM,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,
	•	ТJ,	TM														
	RW:	GH,	GM,	ΚE,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,	BE,	CH,
		CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,
						CI,											
	2003													2002			
PRIORITY	APP:	LN.	INFO	. :				. 1	JS 20	001-2	2688:	21P	P :	2001	0214		

$$R^{2}$$
 $X = 0$
 R^{3}
 $X = 0$
 R^{4}
 $X = 1$
 $X = 0$
 $X =$

Title compds., I [R1 and R2 together may form a substituted arom. ring or AB a heterocyclic ring; or R2 and R3 together may form substituted heterocycle; or R1, R3, or R4 = alkyl, arylalkyl, etc.; X = C, S; Y = O, N with provision when Y = N it forms a 5-membered heterocycle with R3] and II [R5, R6 = arylalkylamine, heterocyclylalkoxy, etc.; R7 = H, MeO, NO2, etc.], are prepd. and disclosed as matrix metalloproteinase (MMP) inhibitors. Thus, III was prepd. in five steps via cyclocondensation of diethylmalonate and benzylurea with subsequent chlorination, substitution with hydrosulfide hydrate to form an in situ intermediate that was reacted with bromoacetaldehyde dimethylacetal, followed by acid catalyzed cyclization and substitution with benzylchloroformate. III was demonstrated to inhibit MMP13 with an IC50 value (in .mu.M) of 0.0230. and II bind allosterically to the catalytic domain of MMP-13 and comprise a hydrophobic group, first and second hydrogen bond acceptors and at least one, and preferably both, of a third hydrogen bond acceptor and a second hydrophobic group. Cartesian coordinates for centroids of the above features are defined in the specification. When the ligand binds to MMP-13, the first, second and third (when present) hydrogen bond acceptors bond resp. with Thr245, Thr247 and Met 253, the first hydrophobic group locates within the S1' channel of MMP-13 and the second hydrophobic group (when present) is relatively open to solvent. The compds. specifically inhibit the matrix metalloproteinase-13 enzyme and thus are useful for treating diseases resulting from tissue breakdown, such as heart disease, multiple sclerosis, arthritis, atherosclerosis, and osteoporosis.

448964-75-8P

IT

DM

CN

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (target compd.; prepn. and pharmaceutical activity of substituted isophthalic acid derivs., multicyclic pyrimidinediones and analogs thereof as matrix metalloproteinase inhibitors)
448964-75-8 CAPLUS

Thieno[2,3-d]pyrimidine-6-carboxylic acid, 1,2,3,4-tetrahydro-2,4-dioxo-3-(phenylmethyl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & O \\
 & H \\
 & N \\
 & S \\
 & C \\
 & C \\
 & O \\$$

L8 ANSWER 9 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2002:583531 CAPLUS

DOCUMENT NUMBER:

138:313877

TITLE:

Design, synthesis and bioactivities of novel

diarylthiophenes: inhibitors of tumor necrosis

factor-.alpha. (TNF-.alpha.) production

AUTHOR(S):

SOURCE:

Fujita, Masakazu; Hirayama, Tetsuya; Ikeda, Naoko

CORPORATE SOURCE: Pharmaceutical Research Laboratories, Nikken Chemicals

Co., Ltd., Saitama-shi, Saitama, 330-0835, Japan Bioorganic & Medicinal Chemistry (2002), 10(10),

3113-3122

CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER:

Elsevier Science Ltd.

DOCUMENT TYPE:

Journal English

LANGUAGE:

AB

CN

The design, synthesis and SAR of novel diarylthiophene derivs. were performed. These compds. were designed by structural hybridization of TNF-.alpha. prodn. inhibitors bearing 4-fluorophenyl and 4-pyridyl groups such as FR133605, FR167653 and SB210313, and 6-acetyl-3-ethoxycarbonyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine found previously by us. As a result, several compds. were more potent in vitro than FR133605 against

TNF-.alpha. prodn. stimulated with lipopolysaccharide.

IT 512786-21-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(design, synthesis and bioactivities of novel diarylthiophenes as inhibitors of tumor necrosis factor-.alpha. prodn.)

RN 512786-21-9 CAPLUS

Thieno[2,3-d]pyrimidine-2,4(1H,3H)-dione, 3-ethyl-5-(4-fluorophenyl)-6-(4-pyridinyl)- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 10 OF 90 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2002:556648 CAPLUS

25

DOCUMENT NUMBER:

138:147549

TITLE: Enhancement of apomorphine-induced penile erection in

10/ 075,073

the rat by a selective .alpha.1D-adrenoceptor

antagonist

AUTHOR(S): Mizusawa, Hiroya; Hedlund, Petter; Sjunnesson, Johan;

Brioni, Jorge D.; Sullivan, James P.; Andersson,

Karl-Erik

CORPORATE SOURCE: Department of Clinical Pharmacology, University of

Lund, Swed.

SOURCE: British Journal of Pharmacology (2002), 136(5),

701-708

CODEN: BJPCBM; ISSN: 0007-1188

PUBLISHER: Nature Publishing Group

DOCUMENT TYPE: Journal LANGUAGE: English

AB 1 Effects of A-322312 (.alpha.1B-adrenoceptor (AR) antagonist), A-119637 (.alpha.1D-AR antagonist), prazosin (non-selective .alpha.1-AR antagonist), and yohimbine (.alpha.2-AR antagonist) were studied in rat corpus cavernosum (CC) and cavernous artery (Acc) prepns. Effects of intracavernous (i.c.) or i.p. administration of .alpha.1-AR antagonists on apomorphine-induced erections were investigated. 2 A-119637 attenuated elec. induced contractions in isolated CC (-logIC50; 8.12.+-.0.15), and relaxed noradrenaline (NA)-contracted prepns. by more than 90% at 10-7 M. At the same concn., the -logEC50 value for NA in Acc was altered from 6.79.+-.0.07 to 4.86.+-.0.13. In the CC and Acc, prazosin similarly inhibited contractile responses. 3 Inhibitory effects of A-322312 (10-7 M) in elec. activated CC were 32.3.+-.5.1%, whereas no effect on concn.-response curves for NA was obsd. in the Acc. Yohimbine (10-8 M and 10-7 M), enhanced elec.-induced contractions in isolated CC by 20 to 50%. At 10-6 M, inhibitory effects of yohimbine were obtained. 4 A-119637 (0.3 .mu.mol kg-1, i.p.) tripled the no. of erections, and produced a 6 fold increase in the duration of apomorphine-induced erectile responses. A-322312, prazosin, or yohimbine did not enhance erections induced by apomorphine. None of the .alpha.1-AR antagonists significantly increased ICP upon i.c. administration. Decreases in blood pressure were seen with A-119637 and prazosin. 5 The present findings show that there is a functional predominance of the .alpha.1D-AR subtype in the rat erectile tissue, and that blockade of this receptor facilitates rat penile erection induced by a suboptimal dose of apomorphine.

IT **255713-47-4**, A 119637

RL: PAC (Pharmacological activity); BIOL (Biological study)
(enhancement of apomorphine-induced penile erection in the rat by a selective .alpha.1D-adrenoceptor antagonist)

RN 255713-47-4 CAPLUS

CN Thieno[2,3-d]pyrimidine-2,4(1H,3H)-dione, 3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-5-phenyl- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 11 OF 90 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2002:465844 CAPLUS DOCUMENT NUMBER: 137:37675

TITLE: Medicinal compositions of nonpeptidyl

INVENTOR(S):

DOCUMENT TYPE:

PATENT NO.

SOURCE:

LANGUAGE:

gonadotropin-releasing hormone agonist or antagonist, process for producing the same and use thereof Suzuki, Hiroshi; Hata, Yoshio Takeda Chemical Industries, Ltd., Japan PATENT ASSIGNEE(S): PCT Int. Appl., 93 pp. CODEN: PIXXD2 Patent Japanese FAMILY ACC. NUM. COUNT: PATENT INFORMATION: KIND DATE APPLICATION NO. DATE ----------WO 2002047722 **A1** 20020620 WO 2001-JP10956 20011214 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG AU 2002021139 20020624 AU 2002-21139 Α5 20011214 JP 2002326960 20021115 JP 2001-380955 A2 20011214 PRIORITY APPLN. INFO.: JP 2000-382431 Α 20001215 WO 2001-JP10956 W 20011214 MARPAT 137:37675 Disclosed are medicinal compns. comprising (i) a nonpeptidyl gonadotropin-releasing hormone agonist or antagonist, (ii) an org. acid or its salt, and (iii) a biodegradable polymer or its salt. These compns. can be efficiently produced, suffer from no trouble in quality control and can achieve a stable releasing speed over a long period of time, even in case where the nonpeptidyl GnRH agonist or antagonist is contained in a large amt. regardless of the soly., m.p. or crystallinity thereof. A compd. 5-(N-benzyl-N-methylaminomethyl)-1-(2,6-difluorobenzyl)-6-[4-(3methoxy ureide)phenyl]-3-phenylthieno[2,3-d]pyrimidine-2,4-(1H,3H)-dione was prepd. and dissolved in dichloromethane with 3-hydroxy-2-naphthoic acid and polylactic acid. The soln. was poured in polyvinyl alc. soln., emulsified, and freeze-dried with mannitol to obtain a microsphere. The microsphere showed controlled-release of the compd. when s.c. administered

in rats. IT 308831-61-0P

CN

OTHER SOURCE(S):

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (medicinal compns. contg. nonpeptidic GnRH agonists or antagonists, org. acids, and biodegradable polymers)

RN 308831-61-0 CAPLUS

> Urea, N-[4-[1-[(2,6-difluorophenyl)methyl]-1,2,3,4-tetrahydro-5-[[methyl(phenylmethyl)amino]methyl]-2,4-dioxo-3-phenylthieno[2,3d]pyrimidin-6-yl]phenyl]-N'-methoxy- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

CAPLUS COPYRIGHT 2003 ACS ANSWER 12 OF 90

ACCESSION NUMBER:

2002:428744 CAPLUS

DOCUMENT NUMBER:

137:10997

TITLE:

Medicinal compositions containing water hardly-soluble

nonpeptidic GnRH agonists or antagonists, and process

for producing the same

INVENTOR(S):

Yamagata, Yutaka; Hata, Yoshio

PATENT ASSIGNEE(S):

Takeda Chemical Industries, Ltd., Japan

SOURCE:

PCT Int. Appl., 87 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

```
PATENT NO.
                                KIND
                                        DATE
                                                              APPLICATION NO.
                                                                                       DATE
       WO 2002043766
                                 A1
                                        20020606
                                                              WO 2001-JP10417 20011129
             W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
                  CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL,
            PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
                   CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
                  BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
       AU 2002018494
                                 A5
                                        20020611
                                                              AU 2002-18494
                                                                                       20011129
                                                              JP 2001-364107
       JP 2003026601
                                 A2
                                        20030129
                                                                                       20011129
DRIORITY APPLIN. INFO .:
                                                          JP 2000-362727
                                                                                  A 20001129
                                                          WO 2001-JP10417 W
                                                                                      20011129
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OTHER SOURCE(S): MARPAT 137:10997

Disclosed are compns. wherein the release of a nonpeptidic GnRH agonist and antagonist having a particularly low soly. is accelerated, namely, compns. contg. a hardly water-sol. nonpeptidic gonadotropin-releasing hormone agonist or antagonist and an arom. hydroxycarboxylic acid or its salt. A compd. 5-(N-benzyl-N-methylaminomethyl)-1-(2,6-difluorobenzyl)-6-[4-(3-methoxyureide)phenyl]-3-phenylthieno[2,3-d]pyrimidine-2,4-(1H,3H)dione was prepd. and dissolved in dichloromethane with salicylic acid.

The soln. was poured in polyvinyl alc. soln., emulsified, and freeze-dried with mannitol to obtain a microsphere. The microsphere showed controlled-release of the compd. when s.c.administered in rats.

IT 308831-61-0P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(medicinal compns. contg. water hardly-sol. nonpeptidic GnRH agonists or antagonists and arom. hydroxycarboxylic acids)

RN 308831-61-0 CAPLUS

Urea, N-[4-[1-[(2,6-difluorophenyl)methyl]-1,2,3,4-tetrahydro-5-CN [[methyl(phenylmethyl)amino]methyl]-2,4-dioxo-3-phenylthieno[2,3d]pyrimidin-6-yl]phenyl]-N'-methoxy- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} R & \text{Me} \\ & | \\ \text{CH}_2 - - \text{N-CH}_2 - \text{Ph} \end{array}$$

REFERENCE COUNT:

24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 13 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:300762 CAPLUS

DOCUMENT NUMBER:

136:340688

TITLE:

Preparation of thienopyrimidinediones as drugs Ingall, Anthony; Bantick, John; Perry, Matthew

PATENT ASSIGNEE(S):

Astrazeneca Ab, Swed.

SOURCE:

Brit. UK Pat. Appl., 62 pp.

CODEN: BAXXDU

DOCUMENT TYPE:

Patent

LANGUAGE:

INVENTOR (S):

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2363377	A1	20011219	GB 2000-14375	20000614
PRIORITY APPLIN. INFO .:		GB	2000-14375	20000614
OTHER SOURCE(S):	MA	RPAT 136:340688		
GI				

$$\begin{array}{c|c}
R^2 & R^3 \\
 & R^3 \\
 & R \\
 & R^3
\end{array}$$

AB Title compds. [I; R = (hetero)aroyl, (hetero)aryl(hydroxy)alkyl, etc.; R1,R2 = H or alk(en)yl; R3 = ZR10 or (hetero)aryl; R10 = (un)substituted alk(en)yl, cycloalkylcarbonyl, halobenzoyl, etc.; Z = bond or (alkyl)imino] were prepd. Thus, I (R1 = CH2CHMe2, R2 = Me)(II; R = R3 = H) was brominated and the product converted in 2 steps to II [R = CH2C6H4(CF3)-2](III; R3 = H) which was alkynylated by HC.tplbond.CCMe2OH to give III (R3 = C.tplbond.CCMe2OH). Data for biol. activity of I were given.

IT 418754-63-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of thienopyrimidinediones as drugs)

RN 418754-63-9 CAPLUS

CN Thieno[2,3-d]pyrimidine-2,4(1H,3H)-dione, 5-(3-hydroxy-3-methyl-1-butynyl)-3-methyl-1-(2-methylpropyl)-6-[[2-(trifluoromethyl)phenyl]methyl]- (9CI) (CA INDEX NAME)

$$F_3C$$
 O
 N
 S
 CH_2
 R

L8 ANSWER 14 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:240593 CAPLUS

DOCUMENT NUMBER: 136:268181

TITLE: Solid preparations containing a large amount of a

physiologically active substance

INVENTOR(S): Nakano, Yoshinori; Yoneyama, Shuji; Ochi, Masashi

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 81 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

```
PATENT NO.
                      KIND DATE
                                          APPLICATION NO. DATE
                                           -----
                                           WO 2001-JP8264
                                                            20010921
     WO 2002024230
                       A1
                            20020328
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS,
             LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
             UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2001088102
                       A5
                            20020402
                                           AU 2001-88102
                                                            20010921
     JP 2002167327
                       A2
                            20020611
                                           JP 2001-290149
                                                            20010921
PRIORITY APPLN. INFO.:
                                        JP 2000-289345
                                                         Α
                                                            20000922
                                        WO 2001-JP8264
                                                        W
                                                            20010921
OTHER SOURCE(S):
                         MARPAT 136:268181
     It is intended to provide granules contg. a large amt. of a physiol.
     active substance which is hardly sol. in water and highly water-repellent,
     and solid prepns. contg. these granules which are excellent in the
     disintegration properties and the elution of the physiol. active
     substance. Disclosed are (1) granules contg. a physiol. active substance
     and a cellulose-based disintegrating agent; (2) granules contg. a physiol.
     active substance, a cellulose-based disintegrating agent and a binder; (3)
     solid prepns. comprising granules (1) or (2) as described above, a
     cellulose-based disintegrating agent and a stearic acid-based lubricant;
     and (4) the solid prepns. (3) as described above which are shaped into
     ellipsoidal tablets. A tablet was formulated contg. 5-(N-benzyl-N-
     methylaminomethyl) -1-(2,6-difluorobenzyl) -6-[4-(3-methoxyureido)phenyl] -3-
     phenylthieno[2,3-d]pyrimidine-2,4(1H,3H)-dione (prepn. given) 100, lactose
     285, starch 50, hydroxypropyl cellulose 20, Ca carmellose 40, 40 and Mg
     stearate 5 mg. The tablet was coated with a compn. contg. hydroxypropyl
     Me cellulose 17.8, titania 2, and iron oxide 0.2 mg.
     308831-61-0P, 5-(N-Benzyl-N-methylaminomethyl)-1-(2,6-
     difluorobenzyl) -6-[4-(3-methoxyureido)phenyl] -3-phenylthieno[2,3-
     d]pyrimidine-2,4(1H,3H)-dione
     RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (prepn. of phenylthienopyrimidinone derivs. and oral formulations
        contg. them)
     308831-61-0 CAPLUS
RN
CN
    Urea, N-[4-[1-[(2,6-difluorophenyl)methyl]-1,2,3,4-tetrahydro-5-
     [[methyl(phenylmethyl)amino]methyl]-2,4-dioxo-3-phenylthieno[2,3-
```

d]pyrimidin-6-yl]phenyl]-N'-methoxy- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} R & \text{Me} \\ & | \\ \text{CH}_2 - - \text{N-CH}_2 - \text{Ph} \end{array}$$

REFERENCE COUNT:

THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 15 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2002:226638 CAPLUS

DOCUMENT NUMBER:

137:136468

TITLE:

Modified purine nucleosides as dangling ends of DNA duplexes: the effect of the nucleobase polarizability

on stacking interactions

AUTHOR (S):

Rosemeyer, Helmut; Seela, Frank

CORPORATE SOURCE:

Laboratorium fuer Organische und Bioorganische Chemie,

Institut fuer Chemie, Fachbereich Biologie/Chemie, Universitaet Osnabrueck, Osnabruck, D-49069, Germany

SOURCE:

Journal of the Chemical Society, Perkin Transactions 2

(2002), (4), 746-750

CODEN: JCSPGI; ISSN: 1472-779X

PUBLISHER:

Royal Society of Chemistry

DOCUMENT TYPE: LANGUAGE:

Journal English

AB Base-modified nucleotide residues have been appended to the 5'-terminus of the self-complementary oligo-2'-deoxynucleotide duplex [5'-d(CGCGCG)]2 as dangling ends. Temp.-dependent UV measurements on the resulting oligomers indicate generally higher thermal stabilities (Tm) compared to that without an overhanging end. The duplex stabilization (.DELTA.Tm) was correlated with the mol. polarizability (.alpha.m) of the base of the pendant nucleoside showing that: the higher the mol. polarizability .alpha.m of a dangling nucleobase, the higher the thermal stability of the

DNA duplex.
IT 96022-82-1

CN

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(modified purine nucleosides as dangling ends of DNA duplexes, the effect of the nucleobase polarizability on stacking interactions)

RN 96022-82-1 CAPLUS

1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 7-(2-deoxy-.beta.-D-erythro-pentofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8. ANSWER 16 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2002:172492 CAPLUS

DOCUMENT NUMBER:

136:232165

TITLE:

Preparation of xanthine derivatives and analogs as

cell signaling inhibitors

INVENTOR(S):

Klein, J. Peter; Klaus, Stephen J.; Kumar, Anil M.;

Gong, Baoqing

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S. Pat. Appl. Publ., 143 pp., Cont.-in-part of U.S.

Ser. No. 8,020, abandoned.

CODEN: USXXCO

DOCUMENT TYPE:

Patent English

LANGUAGE:

Eng

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT		KIND	DATE		APPLICATION NO		
US 2002					US 1999-288556		
US 6469	017	B1	20021022		US 1998-8020	19980116	
WO 2000	061583	A1	20001019		WO 2000-US9139	20000407	
						CA, CH, CN, CR, CU	J.
		-				GM, HR, HU, ID, IL	•
						LS, LT, LU, LV, MA	
						RU, SD, SE, SG, SI	
				•		VN, YU, ZA, ZW, AM	•
		-		-		VN, 10, ZA, ZW, AM	1,
DW.			, MD, RU,			*** DD GU GV DU	
RW:						AT, BE, CH, CY, DE	
				•		PT, SE, BF, BJ, CF	•
		-			MR, NE, SN, TD,	_	
					EP 2000-921774		
R:				FR,	GB, GR, IT, LI,	LU, NL, SE, MC, PT	,
	IE, SI,	LT, LV	, FI, RO				
JP 2002	541258	T2	20021203		JP 2000-610854	20000407	
PRIORITY APP	LN. INFO).:		τ	JS 1998-8020	B2 19980116	
				τ	JS 1995-483871	A2 19950607	
				τ	JS 1995-486264	A2 19950607	
				τ	JS 1999-288556	A2 19990409	
					NO 2000-US9139		
OTHER SOURCE	(S):	MA	RPAT 136:				

Ι

$$\begin{array}{c} \text{HN} & \text{OH} & \text{O} & \text{Me} \\ \text{HN} & \text{I} & \text{I} \\ \text{Me} - \text{CH} \left\{\text{CH}_2\right\}_{4}^{N} & \text{N} \\ \text{O} & \text{N} \\ \text{Me} \end{array}$$

II

Therapeutic compds. I [R1 = H, Me, (un)] substituted C5-9-alkyl, AB C5-9-alkenyl, C5-9-alkynyl, C3-8-hydroxyalkyl, C3-8-alkoxy, C5-9-alkoxyalkyl; R2, R3 = H, halo, oxo, (un) substituted C1-20-alkyl, C1-20-hydroxyalkyl, C(1-20)thioalklyl, C1-20-alkylamino, C1-20-alkylaminoalkyl, C1-20-aminoalkyl, C1-20-aminoalkoxyalkenyl, C1-20-aminoalkoxyalkynyl, C1-20-diaminoalkyl, C1-20-triaminoalkyl, C1-20-tetraaminoalkyl, C5-15-aminotrialkoxyamino, C1-20-alkylamido, C1-20-alkylamidoalkyl, C1-20-amidoalkyl, C1-20-acetamidoalkyl, C1-20-alkenyl, C1-20-alkynyl, C3-8-alkoxyl, C1-11-alkoxyalkyl, and C1-20-dialkoxyalkyl; with the proviso that R1 .noteq. .omega.-1 secondary alc. substituted C5-8-alkyl; X, Y = NR3, R3 = C1-3-alkyl; Z = CR3, R3 = C1-3-alkyl; dashed lines are single or double bonds] pharmaceutically acceptable derivs. (e.g., resolved enantiomers, diastereomers, tautomers, salts and solvates thereof) or prodrugs thereof are described. Thus, CT 7549 (II) was prepd. via redn of 1-(5-oximinohexyl)-3,7-dimethylxanthine using sodium cyanoborohydride in methanol. These novel heterocyclic compds. I having a six membered ring structure fused to a five membered ring structure are found to be useful for the treatment and prevention of symptoms or manifestations assocd. with disorders affected by Interleukin-12 ("IL-12") intracellular signaling, such as, for example, Th1 cell-mediated disorders.

IT 301536-59-4P, CT 12458

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of xanthine derivs. and analogs as cell signaling inhibitors) 301536-59-4 CAPLUS

CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 3-[(5R)-5-hydroxyhexyl]-1,5,7-trimethyl-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN

Me
$$_{\text{OH}}$$
 (CH₂) $_{4}$ $_{\text{N}}$ $_{\text{Me}}$ $_{\text{Me}}$

L8 ANSWER 17 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:31283 CAPLUS

DOCUMENT NUMBER: 136:107510

INVENTOR(S):

TITLE: Medicinal preparations for treating sex

hormone-dependent diseases Igari, Yasutaka; Kamei, Shigeru

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

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SOURCE:
```

PCT Int. Appl., 47 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

```
PATENT NO.
                                                 APPLICATION NO.
                         KIND
                                DATE
                                                                     DATE
                                                 WO 2001-JP5808
     WO 2002002144
                          A1
                                20020110
                                                                     20010704
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
               CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
               GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS,
              LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
              RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
               VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     AU 2001069439
                          A5
                                20020114
                                                 AU 2001-69439
                                                                     20010704
     JP 2002080397
                          A2
                                20020319
                                                 JP 2001-203722
                                                                      20010704
     EP 1297850
                                                 EP 2001-947821
                          A1
                                20030402
                                                                     20010704
              AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
               IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
PRIORITY APPLN. INFO.:
                                              JP 2000-208253
                                                                     20000705
                                              WO 2001-JP5808
                                                                  W
                                                                     20010704
```

OTHER SOURCE(S): MARPAT 136:107510

- Disclosed are medicinal prepns. for treating sex hormone-dependent diseases which comprise a combination of a compd. having a LH-releasing hormone effect or its salt with a compd. having a LH-releasing hormone antagonism or its salt for administering the compd. having a LH-releasing hormone effect or its salt followed by the compd. having a LH-releasing hormone antagonism or its salt. By using these prepns., the concn. of a sex hormone (for example, testosterone, LH, FSH, estrogen) can be quickly recovered after the medicable period of a compd. having a LH-releasing hormone antagonism or its salt or a prepn. contg. the same (preferably a sustained-release prepn.), which makes it possible to definitely det. the drug rest period in an intermittent treatment. A sustained-release microcapsule contg. LHRH antagonist N-acetyl-D-3-(2-naphthyl)alanyl-D-3-(4chlorophenyl) alanyl-D-3-(3-pyridyl) alanyl-Ser-N-methyltyrosyl-D-(.epsilon.-N-nicotinoyl)lysyl-Leu-(.epsilon.-N-isopropyl)lysyl-Pro-D-Ala-NH2 acetate was prepd., and administered to a rat 4 wk after administration of a LHRH agonist Leuplin to examine the blood concn. of testosterone.
- 308831-61-0, 5-(N-Benzyl-N-methyl-aminomethyl)-1-(2,6difluorobenzyl) -6-[4-(3-methoxyureido)phenyl] -3-phenylthieno[2,3d]pyrimidine-2,4(1H,3H)dione
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (use of LHRH agonists and antagonists for intermittent treatment of sex hormone-dependent diseases)
- 308831-61-0 CAPLUS RN
- CN Urea, N-[4-[1-[(2,6-difluorophenyl)methyl]-1,2,3,4-tetrahydro-5-[[methyl(phenylmethyl)amino]methyl]-2,4-dioxo-3-phenylthieno[2,3dlpyrimidin-6-yllphenyl]-N'-methoxy- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 18 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2002:2173 CAPLUS

DOCUMENT NUMBER:

136:272783

TITLE:

Anti-angiogenic activity of a novel multi-substrate

analogue inhibitor of thymidine phosphorylase

AUTHOR(S):

Liekens, Sandra; Bilsen, Filip; De Clercq, Erik; Priego, Eva Maria; Camarasa, Maria-Jose; Perez-Perez,

Maria-Jesus; Balzarini, Jan

CORPORATE SOURCE:

Rega Institute for Medical Research, Katholieke

Universiteit Leuven, Louvain, B-3000, Belg.

SOURCE:

FEBS Letters (2002), 510(1,2), 83-88

CODEN: FEBLAL; ISSN: 0014-5793

PUBLISHER:

Elsevier Science B.V.

DOCUMENT TYPE:

PE: Journal English

LANGUAGE: 7-Deazaxanthine (7-DX) was recently identified as the first purine deriv. with pronounced inhibitory activity against Escherichia coli thymidine phosphorylase (TP) and angiogenesis. In order to 'freeze' the enzyme in an open, inactive conformation, a novel multi-substrate analog inhibitor of TP, contg. an alkyl phosphonate moiety covalently linked to 7-DX, was synthesized. The prototype compd. TP65 (9-(8-phosphonooctyl)-7deazaxanthine) (at 250 .mu.M) completely inhibited TP-induced formation of microvascular sprouts from endothelial cell aggregates in a three-dimensional fibrin gel. In the chick chorioallantoic membrane assay, TP caused a dose-dependent stimulation of angiogenesis, which was completely inhibited by 250 nmol TP65. This dose proved to be non-toxic for the developing chick embryo. TP65 thus emerges as a potent and specific inhibitor of TP and TP-induced angiogenesis, which opens new perspectives for multi-substrate analog inhibitors of TP as potential anti-cancer agents and as inhibitors of angiogenesis and of diseases with enhanced expression of TP.

IT 39929-79-8, 7-Deazaxanthine

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses).

(antiangiogenic activity of a novel multi-substrate analog inhibitor of thymidine phosphorylase)

RN 39929-79-8 CAPLUS

CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 19 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2001:923639 CAPLUS

DOCUMENT NUMBER:

136:58811

TITLE:

Biodegradable polymers for sustained-release

compositions

INVENTOR(S):

Hata, Yoshio; Yamagata, Yutaka; Igari, Yasutaka

Takeda Chemical Industries, Ltd., USA

SOURCE:

PCT Int. Appl., 64 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT ASSIGNEE(S):

```
PATENT NO.
                                            KIND
                                                                                       APPLICATION NO. DATE
                                                        DATE
          WO 2001095940
                                             A1
                                                        20011220
                                                                                       WO 2001-JP5009
                                                                                                                         20010613
                 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
          AU 2001064264
                                                                                      AU 2001-64264
                                              A5
                                                        20011224
                                                                                                                       20010613
                                                                                                                         20010613
          EP 1291023
                                              A1
                                                        20030312
                                                                                      EP 2001-938630
                         AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                          IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
          JP 2002068982
                                              A2
                                                        20020308
                                                                                       JP 2001-180061
                                                                                                                         20010614
PRIORITY APPLN. INFO.:
                                                                                                                A 20000614
                                                                                 JP 2000-178534
                                                                                 WO 2001-JP5009
                                                                                                                   W 20010613
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Disclosed are compns. contg. a nonpeptidyl physiol. active substance and a biodegradable polymer having two or more terminal carboxyl groups or its salt which have the following characteristics: (1) the content of the nonpeptidyl physiol. active substance can be elevated and the release thereof can be regulated or accelerated to thereby ensure the achievement of the pharmacol. effect; (2) in case where the nonpeptidyl physiol. active substance has s.c. irritation, it is expected that the irritation can be overcome by the terminal groups having a high acidity; and (3) having a high glass transition point and thus being nignly stable. 5-(N-Benzyl-N-methylaminomethyl)-1-(2,6-difluorobenzyl)-6-[4-(3-methoxyureido)phenyl]-3-phenylthieno[2,3-d]pyrimidine-2,4(1H,3H)-dione was prepd. and formulated with tartronic acid-terminated polylactic acid to give microcapsules.

IT 308831-61-0P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of thienopyrimidines and formulation with carboxy-terminated

polymers for sustained release)

308831-61-0 CAPLUS RN

CN Urea, N-[4-[1-[(2,6-difluorophenyl)methyl]-1,2,3,4-tetrahydro-5-[[methyl(phenylmethyl)amino]methyl]-2,4-dioxo-3-phenylthieno[2,3d]pyrimidin-6-yl]phenyl]-N'-methoxy- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 20 OF 90 CAPLUS COPYRIGHT 2003 ACS L8

8

ACCESSION NUMBER:

2001:904177 CAPLUS

DOCUMENT NUMBER:

136:37621

TITLE:

Preparation of 6-phenylpyrrolopyrimidinedione

derivatives

INVENTOR (S):

Vidal Juan, Bernat; Gracia Ferrer, Jordi; Prieto Soto,

Jose Manuel; Vega Noverola, Armando

PATENT ASSIGNEE(S):

Almirall Prodesfarma S.A., Spain

SOURCE:

PCT Int. Appl., 76 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE	3	APPLICATION 1	O. DAT	DATE			
WO 2001094350	A1 2001	1213	WO 2001-EP63	06 200	10601			
W: AE, A	G, AL, AM, AT,	AU, AZ,	BA, BB, BG, BR	BY, BZ	CA, CH,	CN,		
co, c	R, CU, CZ, DE,	DK, DM,	DZ, EC, EE, ES,	FI, GE	GD, GE,	GH,		
GM, H	R, HU, ID, IL,	IN, IS,	JP, KE, KG, KP	KR, KZ	LC, LK,	LR,		
LS, L	T, LU, LV, MA,	MD, MG,	MK, MN, MW, MX	MZ, NO	, NZ, PL,	PT,		
RO, R	U, SD, SE, SG,	SI, SK,	SL, TJ, TM, TR	TT, TZ	, UA, UG,	US,		
UZ, V	N, YU, ZA, ZW,	AM, AZ,	BY, KĠ, KZ, MD,	RU, TJ	TM			
			ŠĒ, ŠZ, TZ, UG,					
DE, D	K, ES, FI, FR,	GB, GR,	IE, IT, LU, MC,	NL, PI	SE, TR,	BF,		
BJ, C	F, CG, CI, CM,	GA, GN,	GW, ML, MR, NE,	SN, TD	, TG			
EP 1286997	A1 - 2003	0305	EP 2001-960264 20010601					
R: AT, B	E, CH, DE, DK,	ES, FR,	GB, GR, IT, LI,	LU, NL	, SE, MC,	PT,		
IE, S	I, LT, LV, FI,	RO, MK,	CY, AL, TR					
PRIORITY APPLN. IN	FO.:]	ES 2000-1436	A 200	00607			
		Ţ	NO 2001-EP6306	W 200	10601			
OTHER SOURCE(S):	MARPAT	136:37623						

GI

AB 6-Phenylpyrrolopyrimidine derivs. I [-X-C-Y- represents NHC:CR6 or -X-C-Y- represents CR6:CNH], useful as selective cyclic GMP specific phosphodiesterase (PDE 5) inhibitors, were prepd. E.g., I [R1 = Me; R2 = Pr; R3 = Et; Y = CH:; X = NH; NR4R5 = 4-methylpiperazinyl] was prepd.

Ι

IT 378794-79-7P

RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 6-phenylpyrrolopyrimidinedione derivs. as cyclic GMP specific phosphodiesterase (PDE 5) inhibitors)

RN 378794-79-7 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-[[4-propoxy-3-(2,3,4,7-tetrahydro-3-methyl-2,4-dioxo-1-propyl-1H-pyrrolo[2,3-d]pyrimidin-6-yl)phenyl]sulfonyl]-, ethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & O \\
 & O \\
 & N \\
 & N \\
 & N \\
 & O \\
 & N \\
 & O \\$$

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 21 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2001:816672 CAPLUS

DOCUMENT NUMBER:

135:357940

TITLE:

Preparation of thieno[2,3-d]pyrimidinediones for

treating obstructive airways disease

INVENTOR (S):

Bantick, John; Ingall, Anthony; Perry, Matthew;

Reynolds, Rachel

PATENT ASSIGNEE(S):

Astrazeneca AB, Swed. PCT Int. Appl., 87 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

SOUBCE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE
WO 2001083489 A1 20011108 WO 2001-SE907 20010426

```
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
             HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
             LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
             RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
             VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                             GB 2000-10657
     GB 2361917
                        A1
                             20011107
                                                                20000504
                                             EP 2001-926294
     EP 1280806
                        Α1
                             20030205
                                                                20010426
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                          GB 2000-10657
PRIORITY APPLN. INFO.:
                                                            Α
                                                               20000504
                                          GB 2000-17795
                                                            Α
                                                                20000721
                                          WO 2001-SE907
                                                            W
                                                               20010426
OTHER SOURCE(S):
                          MARPAT 135:357940
GI
```

R1

I

AB The title compds. [I; R = COAr1, CR4R5Ar1, Ar3; Ar1 = (un)substituted 5-10 membered arom. ring system wherein up to 3 ring atoms may be heteroatoms independently selected from N, O, and S; R1, R2 = H, alkyl, alkenyl,

CH2 (cycloalkyl), cycloalkyl; R3 = XAr2; X = SOn, CO, CH(OH); n = 0-2; Ar2 = (un) substituted 5-6 membered arom. ring wherein up to 4 ring atoms may be heteroatoms selected from N, O, and S; R4 = H, alkyl; R5 = H, OH; Ar3 = (un) substituted acenaphthenyl, indanyl, fluorenyl; with the proviso that when X = SOn, then Ar2 does not represent pyridyl or thienyl], useful as immunosuppressants for the treatment of asthma, chronic obstructive pulmonary disease, and allograft rejection, were prepd. E.g. a 3-step synthesis of I [R = 2-F3CC6H4CH2; R1 = iso-Bu; R2 = Me; R3 = 3-furyl (hydroxyl) methyll was described. In a PMA (ionomycin stimulated

3-furyl(hydroxy)methyl] was described. In a PMA/ionomycin-stimulated peripheral blood mononuclear cell proliferation assay, some of the compds. I exhibited IA50 of < 1x10-6 M.

IT 372162-25-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(prepn. of thieno[2,3-d]pyrimidinediones for treating obstructive airways disease)

RN 372162-25-9 CAPLUS

CN Thieno[2,3-d]pyrimidine-2,4(1H,3H)-dione, 3-methyl-1-(2-methylpropyl)-5-(1H-1,2,4-triazol-3-ylthio)-6-[2-(trifluoromethyl)benzoyl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 22 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2001:793414 CAPLUS

DOCUMENT NUMBER:

135:348864

TITLE:

Poly(ADP-ribose) polymerase inhibitors

INVENTOR(S):

Ono, Yukihiro; Otani, Kenichi; Aino, Hiroshi; Saji,

Ikutaro

PATENT ASSIGNEE(S):

Sumitomo Pharmaceuticals Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE JP 2001302515 A2 20011031 JP 2000-116579 20000418 PRIORITY APPLN. INFO.: JP 2000-116579 20000418

OTHER SOURCE(S):

MARPAT 135:348864

Quinazolines, indoles, and pyrrolopyrimidines are claimed as poly(ADP-ribose) polymerase (PARP) inhibitors for the treatment of various diseases including cerebral, nervous system, gastrointestinal, and eye diseases. 1-Methyl-2,4(1H,3H)-quinazolinedione, 1-(cyclopropylmethyl)-2,4(1H,3H)-quinazolinedione, 4-methyl-2(1H)-quinazolinone, 1-ethyl-1H-pyrrolo[2,3-d]-pyrimidine-2,4(3H,7H)dione, and 1-ethyl-6,7-dihydro-1H-pyrrolo[2,3-d]-pyrimidine-2,4(3H,5H)dione were in vitro tested for inhibitory activities of PARP.

IT 53680-91-4

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(poly(ADP-ribose) polymerase inhibitors for treatment of various diseases)

53680-91-4 CAPLUS RN

CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 1-ethyl- (9CI) NAME)

ANSWER 23 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2001:781118 CAPLUS

DOCUMENT NUMBER:

135:339291

Germany

TITLE:

Triplex-forming oligonucleotides inhibiting ICAM-1

gene expression and their therapeutic use

INVENTOR(S):

Degitz, Klaus Karl; Besch, Robert

PATENT ASSIGNEE(S):

SOURCE:

PCT Int. Appl., 61 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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PATENT NO.
                                  KIND
                                           DATE
                                                                   APPLICATION NO.
                                                                                             DATE
                                  _ _ _ _
                                           _____
                                                                   -----
       WO 2001079487
                                   A2
                                           20011025
                                                                   WO 2001-DE1509
                                                                                             20010418
       WO 2001079487
                                   Α3
                                           20020620
             W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                                                 DE 2000-10019252 20000418
       DE 10019252
                                           20011031
                                   A1
PRIORITY APPLN. INFO.:
                                                              DE 2000-10019252 A 20000418
       The invention relates to triple helix-forming oligonucleotides which
       become attached to double-stranded genomic ICAM-1 DNA sequences and thus
        inhibit transcription. The invention also relates to these
       oligonucleotides as therapeutic agents in the therapy or prophylaxis of
       ICAM-1-assocd. diseases. Thus, ICAM-1 gene expression in human A431
       keratinocyte cells was inhibited by GGTTTGTTGTGTGGGT and, more
       efficiently, by 3-methoxypsoralen-GTTGGTGGGTTGGGGGG conjugate and irradn.
       with UV light.
IT
       39929-79-8, 7-Deazaxanthine
       RL: BOC (Biological occurrence); BSU (Biological study, unclassified);
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BIOL (Biological study); OCCU (Occurrence)

(oligonucleotides contg.; triplex-forming oligonucleotides inhibiting ICAM-1 gene expression and their therapeutic use)

RN 39929-79-8 CAPLUS

CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione (9CI) (CA INDEX NAME)

L8 ANSWER 24 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2001:780733 CAPLUS

DOCUMENT NUMBER:

135:313627

TITLE:

Preventives/remedies for Alzheimer's disease

INVENTOR(S): Furuya, Shuichi; Suzuki, Nobuhiro

PATENT ASSIGNEE(S):

Takeda Chemical Industries, Ltd., Japan

SOURCE:

PCT Int. Appl., 80 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO. KIND DATE						APPLICATION NO. DATE											
										-								
	WO	2001	0787	80	A	1	2001	1025		W	20	01-J	P318:	9	2001	0413		
		W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	ΡI,	GB,	GD,	GE,	ĢΗ,	GM,
,	•		HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,
			LU,	LV,	ΜA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	RO,	RU,
			SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VN,
			ΥU,	ZA,	ZW,	AM,	ΑZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM				
		RW:	GH,	GM,	KΕ,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,
			DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,
			ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG		
	BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG JP 2001354588 A2 20011225 JP 2001-115804 20010413																	
PRIOR	ITI	APP	LN.	INFO	. :					JP 2	000-	1120	46	Α	2000	0413		
GI .																		•

AB Preventives/remedies for Alzheimer's disease contg. a compd. having GnRH antagonism have excellent effects of preventing and treating Alzheimer's disease with little toxicity. As the compd. having GnRH antagonism, compds. represented by the structural formula (I) may be cited.

IT 308831-61-0DP, salts

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

Ι

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preventives/remedies for Alzheimer's disease)

RN 308831-61-0 CAPLUS

CN Urea, N-[4-[1-[(2,6-difluorophenyl)methyl]-1,2,3,4-tetrahydro-5-[[methyl(phenylmethyl)amino]methyl]-2,4-dioxo-3-phenylthieno[2,3d]pyrimidin-6-yl]phenyl]-N'-methoxy- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \mathbf{R} & \text{Me} \\ & | \\ \mathbf{CH_2} - \mathbf{N} - \mathbf{CH_2} - \mathbf{Ph} \end{array}$$

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 25 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2001:444501 CAPLUS

DOCUMENT NUMBER: TITLE:

135:56063

inhibitors

INVENTOR (S):

Kimura, Tomio; Miyazaki, Shojiro; Ueda, Keishi;

Sulfonamide derivatives as matrix metalloproteinase

Tanzawa, Kazuhiko; Ushiyama, Shigeru; Takasaki, Wataru

PATENT ASSIGNEE(S): Sankyo Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 120 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001163786	A2	20010619	JP 2000-297744	20000929
PRIORITY APPLN. INFO.	:	JР	1999-278300 A	19990930
OTHER SOURCE(S):	MA	RPAT 135:56063		
GI				

IT

The sulfonamide derivs. (I; R1 = H, NHOH; R2 = H, (substituted) alkyl, cycloalkyl, -AR6 [A = O, -S(O)m- or -n(R9) - with alkylene; R6 = other groups]; R3 = H, (substituted) -alkyl, -cycloalkyl, -alkenyl, and -alkynyl; R4 = (substituted) (hetero) arylene; R5 = (substituted) -alkyl and -(hetero) aryl) and their pharmacol. acceptable salts are claimed as matrix metalloproteinase inhibitors for treatment of arthritis, rheumatoid arthritis, cancer metastasis, and breast cancer.

246263-34-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
 (sulfonamide derivs. as matrix metalloproteinase inhibitors)

RN 246263-34-3 CAPLUS

CN Thieno[2,3-d]pyrimidine-3(2H)-butanamide, 1,4-dihydro-N-hydroxy-5-methyl-alpha.-[methyl[(4-phenoxyphenyl)sulfonyl]amino]-2,4-dioxo-(9CI) (CA INDEX NAME)

L8 ANSWER 26 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2001:334737 CAPLUS

DOCUMENT NUMBER:

135:107300

TITLE:

Structure-Activity Studies for a Novel Series of Bicyclic Substituted Hexahydrobenz[e]isoindole

.alpha.1A Adrenoceptor Antagonists as Potential Agents

for the Symptomatic Treatment of Benign Prostatic

Hyperplasia

AUTHOR (S):

Meyer, Michael D.; Altenbach, Robert J.; Bai, Hao; Basha, Fatima Z.; Carroll, William A.; Kerwin, James F., Jr.; Lebold, Suzanne A.; Lee, Edmund; Pratt, John K.; Sippy, Kevin B.; Tietje, Karin; Wendt, Michael D.; Brune, Michael E.; Buckner, Steven A.; Hancock, Arthur

A.; Drizin, Irene

CORPORATE SOURCE:

Neurological and Urological Diseases Research

Pharmaceutical Products Division, Abbott Laboratories,

Abbott Park, IL, 60064, USA

SOURCE:

Journal of Medicinal Chemistry (2001), 44(12),

1971-1985

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER:
DOCUMENT TYPE:

American Chemical Society

LANGUAGE:

Journal English

OTHER SOURCE(S):

CASREACT 135:107300

GI

AB In search of a uroselective .alpha.1A subtype selective antagonist, a novel series of 6-methoxyhexahydrobenz[e]isoindoles attached to a bicyclic heterocyclic moiety via a two-carbon linker was synthesized. It was found that in contrast to a previously described series of tricyclic heterocycles, this bicyclic series has very specific requirements for the heterocyclic attachments. The most important structural features contributing to the .alpha.1A/.alpha.1B selectivity of these compds. were identified. In vitro functional assays for the .alpha.1 adrenoceptor subtypes were used to further characterize the most selective compds., and in vivo models of vascular vs prostatic tone were used to assess uroselectivity. The quinazolinone I showed the highest degree of selectivity in the radioligand binding assays (56-fold), in the in vitro functional tests (80-fold), and for in vivo prostate selectivity (960-fold).

IT 179240-03-0P

CN

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); BIOL (Biological study); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and structure-activity studies of bicyclic-substituted hexahydrobenz[e]isoindole .alpha.1A adrenoceptor antagonists)

RN 179240-03-0 CAPLUS

Thieno[2,3-d]pyrimidine-2,4(1H,3H)-dione, 3-[2-[(3aR,9bR)-1,3,3a,4,5,9b-hexahydro-6-methoxy-2H-benz[e]isoindol-2-yl]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 27 OF 90 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2001:321149 CAPLUS

DOCUMENT NUMBER: 135:137465

TITLE:

Two Novel and Potent 3-[(o-

Methoxyphenyl)piperazinylethyl]-5-phenylthieno[2,3-d]pyrimidine-2,4-diones Selective for the .alpha.1D

Receptor

10/ 075,073

SOURCE:

Carroll, W. A.; Sippy, K. B.; Esbenshade, T. A.; AUTHOR(S):

Buckner, S. A.; Hancock, A. A.; Meyer, M. D.

Neurological and Urological Diseases Research, Abbott CORPORATE SOURCE:

Laboratories, Abbott Park, IL, 60064-6101, USA Bioorganic & Medicinal Chemistry Letters (2001),

11(9), 1119-1121

CODEN: BMCLE8; ISSN: 0960-894X

Elsevier Science Ltd. PUBLISHER:

DOCUMENT TYPE: Journal English LANGUAGE:

CASREACT 135:137465 OTHER SOURCE(S):

GT

AB The synthesis and in vitro characterization of A-119637 (I, R = H) and A-123189 (I, R = Me), two novel, selective and potent .alpha.1D antagonists, are described.

IT 110164-21-1P

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and binding to .alpha.1D receptor)

RN 110164-21-1 CAPLUS

CN Thieno[2,3-d]pyrimidine-2,4(1H,3H)-dione, 3-[2-[4-(2-methoxyphenyl)-1piperazinyl]ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & \\ & & \\$$

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 28 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:247319 CAPLUS

DOCUMENT NUMBER: 134:266102

TITLE: Preparation of phenylsulfonamide derivatives as matrix

metalloproteinase 13 and aggrecanase inhibitors

INVENTOR (S):

Kimura, Tomio; Tamaki, Kazuhiko; Miyazaki, Shoujiro;

Kurakata, Shinichi; Fujiwara, Kosaku

PATENT ASSIGNEE(S): Sankyo Company, Limited, Japan

PCT Int. Appl., 251 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese 10/ 075,073

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 2001023363 A1 20010405 WO 2000-JP6798 20000929

W: AU, BR, CA, CN, CZ, HU, ID, IL, IN, KR, MX, NO, NZ, PL, RU, TR, US, ZA

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

JP 2001163885 A2 20010619 JP 2000-297743 20000929 PRIORITY APPLN. INFO.: JP 1999-275857 A 19990929

OTHER SOURCE(S): MARPAT 134:266102

GΙ

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. [R4MLSO2NR3CH(AR2)COR1; wherein R1 is OH or NHOH; R2 = Q, Q1; A is alkylene which may be interrupted by an ether linkage or the like; R3 is hydrogen, alkyl, or the like; L is optionally substituted (hetero)arylene; M is oxygen or sulfur; and R4 is optionally substituted alkyl, (hetero)aryl, or the like] and pharmaceutically acceptable salts, exhibiting inhibitory activities against matrix metalloproteinase 13 and aggrecanase, are prepd. Thus, the title compd. I was prepd. and tested.

IT 332096-46-5P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of phenylsulfonamide derivs. as matrix metalloproteinase 13 and aggrecanase inhibitors)

RN 332096-46-5 CAPLUS

CN Thieno[2,3-d]pyrimidine-1(2H)-butanamide, 3,4-dihydro-N-hydroxy-5-methyl-alpha.-[methyl[(4-phenoxyphenyl)sulfonyl]amino]-2,4-dioxo-, (.alpha.R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 29 OF 90 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2001:241744 CAPLUS DOCUMENT NUMBER: 134:252587

TITLE:

Preparation of desazapurine-nucleotides and the use

thereof for nucleic acid sequencing and as antiviral

INVENTOR(S):

Seela, Frank; Muth, Heinz-Peter; Kaiser, Klaus;

Bourgeois, Werner; Muhlegger, Klaus; Von Der Eltz,

Herbert; Batz, Hans-Georg

PATENT ASSIGNEE(S):

Roche Diagnostics G.m.b.H., Germany

SOURCE:

U.S., 15 pp., Cont.-in-part of U.S. Ser. No. 179,862,

abandoned. CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE ·	APPLICATION NO.	DATE
US 6211158	B1	20010403	US 1992-908513	19920626
DE 3739366	A1	19881027	DE 1987-3739366	19871120
ZA 8802446	Α	19881228	ZA 1988-2446	19880408
DD 269854	A5	19890712	DD 1988-314564	19880408
PRIORITY APPLN. INFO.	:		DE 1987-3712280 A	19870410
			DE 1987-3739366 A	19871120
			US 1988-179862 B2	19880411

OTHER SOURCE(S):

MARPAT 134:252587

AB The present invention provides desazapurine-nucleoside derivs. of the general formula I; wherein X is a nitrogen atom or a methine radical, W is a nitrogen atom or a C-R4 radical, R1-R4 , which can be the same or different, are hydrogen or halogen atoms, hydroxyl or mercapto groups, lower alkyl, lower alkylthio, lower alkoxy, aralkyl, aralkoxy or aryloxy radicals or amino groups optionally substituted once or twice, R5 is a hydrogen atom or a hydroxyl group, R6 and R7 are each hydrogen atoms or one of them is a halogen atom or a cyano or azido group or an amino group optionally substituted once or twice, whereby one of R6 and R7 can also be a hydroxyl group when X is a methine radical and, in addn., R5 and R7 can together also represent a further valency bond between C-2' and C-3' and Y is a hydrogen atom or a mono-, di- or tri-phosphate group and the use thereof for nucleic acid sequencing and as antiviral agents. Thus, 2-amino-7-deaza-2',3'-dideoxy-9-.beta.-D-ribofuranosyl-purine-6-one was prepd. and used for nucleic acid sequencing and as antiviral agents.

Compds. I according to the present invention can also be advantageously used for DNA sequencing according to Sanger's method. The sequencing of d(G-C)-rich DNA fragments is, in particular, made difficult by the formation of secondary structures which lead to a band compression in the region of d(G-C) clusters.

IT 120552-11-6P

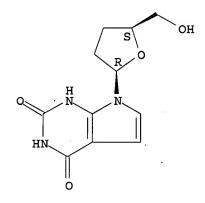
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of desazapurine-nucleotides and the use thereof for nucleic acid sequencing and as antiviral agents)

RN 120552-11-6 CAPLUS

CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 7-[(2R,5S)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 30 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2000:909212 CAPLUS

DOCUMENT NUMBER:

134:56691

TITLE:

Preparation of piperazinyl thienopyrimidine diones as

selective .alpha.-1D adrenoceptor antagonists

INVENTOR(S):

Meyer, Michael D.; Caroll, William A.

PATENT ASSIGNEE(S): SOURCE:

Abbott Laboratories, USA.

U.S., 16 pp. CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

US 6166019 A 20001226 US 1999-351090 19990709

PRIORITY APPLN. INFO: US 1998-92988P P 19980716

OTHER SOURCE(S): MARPAT 134:56691

GI

AB The title compds. [I; R1-R3 = halo, OH, NO2, etc.; n = 2-10; R4 = II (wherein U, taken together with the carbon atoms to which it is attached forms thieno ring, etc.)] and their pharmaceutically acceptable salts, which are selective alpha-1D adrenoceptor antagonists and may be useful for treating disease states such as hypertension, were prepd. E.g., a 3-step synthesis of III as methanesulfonate salt which showed Ki of 0.213 nM against .alpha.-1D binding, was given.

IT 255713-48-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of piperazinyl thienopyrimidine diones as selective .alpha.-1D adrenoceptor antagonists)

III

RN 255713-48-5 CAPLUS

Thieno[2,3-d]pyrimidine-2,4(1H,3H)-dione, 3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-5-phenyl-, monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CN

CRN 255713-47-4 CMF C25 H26 N4 O3 S

CM 2

10/ 075,073

CRN 75-75-2 CMF C H4 O3 S

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 31 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2000:864913 CAPLUS

DOCUMENT NUMBER:

134:4946

TITLE:

Thienopyrimidines, their production and use as

gonadotropin releasing hormone antagonists

INVENTOR(S):

Furuya, Shuichi; Suzuki, Nobuhiro; Choh, Nobuo; Nara,

PATENT ASSIGNEE(S):

Takeda Chemical Industries, Ltd., Japan

PCT Int. Appl., 89 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

English

FAMILY ACC. NUM. COUNT:

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. WO	2.000	0567	39	A	2000	0928	WO 2000-JP1777 20000323										
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	RW	GH,	GM,	ΚE,	LS,	MW,	SD,	SL,	ŜΖ,	TZ,	ŪĠ,	ZW,	AT,	BE,	CH,	CY,	DE,
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							GW,									-	•
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EI	2 1163	3244		A	1	2001	1219		E	P 20	00-93	3	20000	323			
														NL,		MC,	PT,
			SI,										·	•			•
US	6297	7379		B	1	2001	1002		υ	S 20	00-53	30495	5	20000	0426		
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NC	2001	0046	03	Α		2001	1126	•	N	0 20				20010			
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														20000			
OTHER S	SOURCE	E(S):			MAR	PAT	134:4	1946									

^{*} STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Methods for prepn. of thienopyrimidines I (R1, R2 = H, OH, (un)substituted C1-4 alkoxy, C1-4 alkoxy-carbonyl or C1-4 alkyl; R3 = H, halo, OH or (un)substituted C1-4 alkoxy, n = 0-5, if n = 2 then two adjacent R3 may form C1-4 alkylenedioxy; R4 = H or C1-4 alkyl; R6 = (un)substituted C1-4 alkyl or a group of the formula Q wherein R5 is hydrogen or R4 and R5 may form heterocycle); or a pharmaceutically acceptable salt thereof, having excellent GnRH-antagonizing activity, were disclosed, as well as pharmaceutical compns. for treating sex hormone-dependent diseases. Thus, compd. II [R7 = MeONHCONH (III)] was prepd. by reacting the starting amine II (R7 = NH2) with N,N'-carbonyldiimidazole followed by O-methylhydroxylamine hydrochloride. The hydrochloride salt of III demonstrated an IC50 value of 0.0001 .mu.M against binding of 125I-leuprorelin at human GnRH receptors expressed in CHO cells.

IT 308831-61-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(prepn. of thienopyrimidines as gonadotropin releasing hormone antagonist)

RN 308831-61-0 CAPLUS

CN Urea, N-[4-[1-[(2,6-difluorophenyl)methyl]-1,2,3,4-tetrahydro-5-[[methyl(phenylmethyl)amino]methyl]-2,4-dioxo-3-phenylthieno[2,3-d]pyrimidin-6-yl]phenyl]-N'-methoxy- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} R & \text{Me} \\ & | \\ \text{CH}_2 - - \text{N-CH}_2 - \text{Ph} \end{array}$$

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 32 OF 90 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2000:742096 CAPLUS

DOCUMENT NUMBER. 132.20022

DOCUMENT NUMBER: 133:296325

TITLE: Preparation of xanthine derivatives and analogs as

cell signaling inhibitors

INVENTOR(S): Klein, J. Peter; Klaus, Stephen J.; Kumar, Anil M.;

Gong, Baoqing

PATENT ASSIGNEE(S): Cell Therapeutics, Inc., USA

SOURCE: PCT Int. Appl., 146 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 8

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PATENT NO.
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                                            WO 2000-US9139
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             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
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                       A1
                                                              19990409
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                       A1
                            20020116
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PRIORITY APPLN. INFO.:
                                         US 1995-483871
                                                          A2 19950607
                                         US 1995-486264
                                                          A2 19950607
                                                          A2 19990409
                                         US 1999-288556
                                         US 1994-199368
                                                          B2 19940218
                                         US 1994-217051
                                                          B1 19940324
                                         US 1998-8020
                                                          B2 19980116
                                         WO 2000-US9139
                                                          W 20000407
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OTHER SOURCE(S):

MARPAT 133:296325

AB Therapeutic compds. I [R1 = H, Me, (un) substituted C5-9-alkyl, C5-9-alkenyl, C5-9-alkynyl, C3-8-hydroxyalkyl, C3-8-alkoxy, C5-9-alkoxyalkyl; R2, R3 = H, halo, oxo, (un)substituted C1-20-alkyl, C1-20-hydroxyalkyl, C(1-20)thioalklyl, C1-20-alkylamino, C1-20-alkylaminoalkyl, C1-20-aminoalkyl, C1-20-aminoalkoxyalkenyl, C1-20-aminoalkoxyalkynyl, C1-20-diaminoalkyl, C1-20-triaminoalkyl, C1-20-tetraaminoalkyl, C5-15-aminotrialkoxyamino, C1-20-alkylamido, C1-20-alkylamidoalkyl, C1-20-amidoalkyl, C1-20-acetamidoalkyl, C1-20-alkenyl, C1-20-alkynyl, C3-8-alkoxyl, C1-11-alkoxyalkyl, and C1-20-dialkoxyalkyl; with the proviso that R1 .noteq. .omega.-1 secondary alc. substituted C5-8-alkyl; X, Y = NR3, R3 = C1-3-alkyl; \bar{Z} = CR3, R3 = C1-3-alkyl; dashed lines are single or double bonds] pharmaceutically acceptable derivs. (e.g., resolved enantiomers, diastereomers, tautomers, salts and solvates thereof) or prodrugs thereof are described. Thus, CT11495 [I; R1 = Me R2 = (CH2)4CH(OH)Me-(R), X = NMe, YZ= N:CH] was prepd., via N-alkylation of 1,7-dimethylxanthine (I; R1 = Me R2 = H, X =NMe, YZ= N:CH) with (R)-5-acetoxy-1-bromohexane followed by O-deacetylation. These novel heterocyclic compds. I having a six membered ring structure fused to a five membered ring structure are found to be useful for the treatment and prevention of symptoms or manifestations assocd. with disorders affected by Interleukin-12 ("IL-12") intracellular

signalling, such as, for example, Th1 cell-mediated disorders.

301536-59-4P, CT 12458

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(pn. of xanthine derivs. and analogs as cell signaling inhibitors)

301536-59-4 CAPLUS RN

CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 3-[(5R)-5-hydroxyhexyl]-1,5,7-trimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 33 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2000:736052 CAPLUS

DOCUMENT NUMBER:

134:97065

TITLE:

Kinetic analysis of novel multisubstrate analoque

inhibitors of thymidine phosphorylase

AUTHOR (S):

Balzarini, J.; Degreve, B.; Esteban-Gamboa, A.;

Esnouf, R.; De Clercq, E.; Engelborghs, Y.; Camarasa,

M.-J.; Perez-Perez, M.-J.

CORPORATE SOURCE:

Rega Institute for Medical Research, Katholieke

Universiteit Leuven, Louvain, B-3000, Belg.

SOURCE:

FEBS Letters (2000), 483(2,3), 181-185

CODEN: FEBLAL; ISSN: 0014-5793

PUBLISHER:

Elsevier Science B.V.

DOCUMENT TYPE:

Journal English

LANGUAGE: A kinetic anal. was performed for the novel 1-(8-phosphonooctyl)-6-amino-5bromouracil and 1-(8-phosphonooctyl)-7-deazaxanthine inhibitors of Escherichia coli thymidine (dThd) phosphorylase (TPase). The structure of the compds. was rationally designed based on the available crystal structure coordinates of bacterial TPase. These inhibitors reversibly inhibited TPase. Kinetic anal. revealed that the compds. inhibited TPase in a purely competitive or mixed fashion not only when dThd, but also when inorg. phosphate (Pi), was used as the variable substrate. In contrast, the free bases 6-amino-5-bromouracil and 7-deazaxanthine behaved as non-competitive inhibitors of the enzyme in the presence of variable Pi concns. while being competitive or mixed with respect to thymine as the natural substrate. Our kinetic data thus revealed that the novel 1-(8-phosphonooctyl)pyrimidine/purine derivs. are able to function as multisubstrate inhibitors of TPase, interfering at two different sites (dThd(Thy) - and phosphate-binding site) of the enzyme. To our knowledge, the described compds. represent the first type of such multisubstrate analog inhibitors of TPase; they should be considered as lead compds. for the development of mechanistically novel type of TPase inhibitors.

IT 39929-79-8, 7-Deazaxanthine

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(kinetic anal. of novel multisubstrate analog inhibitors of thymidine

phosphorylase)

39929-79-8 CAPLUS

RN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione (9CI) (CA INDEX NAME) CN

REFERENCE COUNT:

19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 34 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2000:161290 CAPLUS

DOCUMENT NUMBER:

132:194389

TITLE:

Preparation of thieno[2,3-d]pyrimidine-2,4(1H,3H)-

diones as immunosuppressants

INVENTOR (S):

Bantick, John; Cooper, Martin; Perry, Matthew; Thorne,

Philip

PATENT ASSIGNEE(S):

Astra Pharmaceuticals Ltd., UK; Astra Aktiebolag

SOURCE:

GΙ

PCT Int. Appl., 99 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT NO.		KIND DATE APPLICATION NO. DATE							
WO 2000012	514 A1 200								
W: AE	, AL, AM, AT, AU	, AZ, BA,	BB, BG, BR, B	Y, CA, CH, CN, CR, CU,					
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IN	, IS, JP, KE, KG	, KP, KR,	KZ, LC, LK, LI	R, LS, LT, LU, LV, MD,					
MG	, MK, MN, MW, MX	, NO, NZ,	PL, PT, RO, RI	U, SD, SE, SG, SI, SK,					
SL	, TJ, TM, TR, TT	, UA, UG,	US, UZ, VN, Y	U, ZA, ZW, AM, AZ, BY,					
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RW: GH	, GM, KE, LS, MW	, SD, SL,	SZ, UG, ZW, A	r, BE, CH, CY, DE, DK,					
				r, SE, BF, BJ, CF, CG,					
CI	, CM, GA, GN, GW	, ML, MR,	NE, SN, TD, TO	g i					
CA 2339664	AA 200	00309	CA 1999-233	9664 19990818					
AU 9957677	A1 200	00321	AU 1999-576'	77 19990818					
EP 1107973	A1 200	10620	EP 1999-9449	964 19990818					
R: AT	, BE, CH, DE, DK	, ES, FR,	GB, GR, IT, L	I, LU, NL, SE, MC, PT,					
	, SI, LT, LV, FI		· · · ·						
JP 2002523!	511 T2 200	20730	JP 2000-5675	536 19990818					
NZ 509809	A 200	21126	NZ 1999-5098	309 19990818					
	B1 2001			337 19991013					
PRIORITY APPLN.	INFO.:	5	SE 1998-2895	A 19980828					
			NO 1999-SE1400						
OTHER SOURCE(S)	: MARPAT			•					

The title compds. (I) [wherein R = C(0)Ar1 or C(R4)(R5)Ar1;R1 and R2 = C(0)Ar1AB independently H, (cyclo) alkyl, alkenyl, or cycloalkylmethyl; R3 = H or XR9 or XAr2; R4 = H or alkyl; R5 = H or OH; R9 = Me optionally substituted by 1 or more CN, CO2H, alkoxycarbonyl, tetrazolyl, (un)substituted carboxyamido; R10 = H, alkyl, or R9; X = 0, S(0)n, C(0)NR10, C(0)0, NHC(0)NR10, NHC(0)0, or SO2NR10; Ar1 = (un)substituted heteroaryl, Ar2 = (un) substituted Ph, pyridinyl, thienyl, pyridone, or pyridine N-oxide; n =0-2] were prepd. as immunosuppressants. for the treatment of reversible obstructive airway diseases, such as asthma, bronchitis, and rhinitis. For example, II was formed in a 4-step sequence involving (1) N-addn. of 1-iodo-2-methylpropane to 6-chloro-3-methyl-1H-pyrimidine-2,4-(1H,3H)dione, (2) thiolation of the chloro compd. with NaSH.H2O, (3) cycloaddn. of the 6-thioxopyrimidinedione with aq. ClCH2CHO, and (4) coupling of the thienopyrimidinedione with 1-methylbenzimidazole-2-carboxaldehyde. In a PMA/ionomycin-stimulated peripheral blood mononuclear cell (PBMC) proliferation assay, I exhibited IA50 values of < 1 .mu.M.

IT 259861-26-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(target compd.; prepn. of thieno[2,3-d]pyrimidine-2,4(1H,3H)-diones as immunosuppressants)

259861-26-2 CAPLUS RN

Thieno[2,3-d]pyrimidine-2,4(1H,3H)-dione, 6-[hydroxy(1-methyl-1H-CN benzimidazol-2-yl)methyl]-3-methyl-1-(2-methylpropyl)- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 35 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:96284 CAPLUS

DOCUMENT NUMBER: 132:305019

TITLE: Design, Synthesis, and Enzymatic Evaluation of

Multisubstrate Analogue Inhibitors of Escherichia coli

Thymidine Phosphorylase

AUTHOR(S): Esteban-Gamboa, Antonio; Balzarini, Jan; Esnouf,

Robert; De Clercq, Erik; Camarasa, Maria-Jose;

Perez-Perez, Maria-Jesus

Instituto de Quimica Medica, C.S.I.C., Madrid, 28006, CORPORATE SOURCE:

SOURCE: Journal of Medicinal Chemistry (2000), 43(5), 971-983

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

A series of acyclic phosphonate derivs. of thymine has been synthesized AB and tested as multisubstrate analog inhibitors of Escherichia coli

thymidine phosphorylase. The compds. synthesized include

1-(phosphonoalkyl)thymines with six to nine methylenes (1-4, resp.);

1-[(Z)-4-phosphonomethoxy-2-butenyl]thymine (5) and its Bu and 2,3-cis-dihydroxybutyl derivs. (6 and 7, resp.); 1-[(Z)-(4-

(phosphonomethoxy) methoxy) -2-butenyl] thymine (8) and also its Bu and

2,3-cis-dihydroxybutyl analogs (9 and 10); and 1-[((Z)-4-

(phosphonomethoxy) -2-butenoxy) methyl] thymine (11). Evaluation of these compds. against E. coli revealed significant enzymic inhibition by 2, 3, 4, 6, and 8 at a concn. of 1000 .mu.M, 3 and 4 being the most potent. Replacement of the thymine base in 3 by 6-amino-5-bromouracil and 7-deazaxanthine afforded compds. 12 and 13, which showed a pronounced improvement of TPase inhibition, comparable to 7-deazaxanthine. inorg. phosphate was used as a variable substrate, compds. 12 and 13 displayed competitive kinetics with respect to phosphate, indicating a direct interaction of these compds. with the phosphate binding site. Also compds. 12 and 13 were found to be competitive inhibitors of TPase against thymidine as a variable substrate. These results are consistent with the compds. being multisubstrate analog inhibitors of E. coli TPase, and they represent the first example of such TPase inhibitors.

39929-79-8P, 7-Deazaxanthine TT

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(design, synthesis, and enzymic evaluation of multisubstrate analog inhibitors of thymidine phosphorylase)

RN 39929-79-8 CAPLUS

1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione (9CI) (CA INDEX NAME)

CN

REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 36 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:68462 CAPLUS

DOCUMENT NUMBER: 132:107962

TITLE: Preparation of piperazinylalkyl pyrimidinedione

compounds selective for adrenoceptors

INVENTOR(S): Meyer, Michael D.; Carroll, William A.

PATENT ASSIGNEE(S): Abbott Laboratories, USA SOURCE: PCT Int. Appl., 52 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATE	NT NO.	K	KIND DATE			APPLI	CATIO	DATE	DATE			
WO 20	0000040	27 <i>I</i>	1 200	00127		WO 19	99-US	15732	19990	712		
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					WO	1999-	US157	32 W	19990	712		
OTHER SOUR	RCE(S):		MARPAT	132:1	07962							

The title compds. [I; R1-R3 = halo, OH, NO2, etc.; R4 = II (wherein U taken together with the carbon atoms to which it is attached, forms a mono- or disubstituted 5-membered heterocycle having 4 carbon atoms, 2 double bonds, and one heteroatom selected from O, S, NH, N(alkyl), a mono or disubstituted 6-membered heterocycle contg. 3 double bonds and either 1, 2 or 3 N atoms, etc.; R5 = H, alkyl, alkenyl, etc.); n = 2-10] and their pharmaceutically acceptable salts, which are selective .alpha.-1D adrenoceptor antagonists and may be useful for treating disease states such as benign prostatic hyperplasia, hypertension, detrusor instability and incontinence, were prepa. E.g., a 3-step synthesis of TIT.MeSO3H which showed Ki of 0.213 nM against .alpha.1D binding (rat), was given.

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (prepn. of piperazinylalkyl pyrimidinedione compds. selective for adrenoceptors)

RN 255713-48-5 CAPLUS

CN Thieno [2,3-d] pyrimidine-2,4 (1H,3H) -dione, 3-[2-[4-(2-methoxyphenyl)-1piperazinyl]ethyl]-5-phenyl-, monomethanesulfonate (9CI) (CA INDEX NAME)

CM

255713-47-4 CRN CMF C25 H26 N4 O3 S

$$\begin{array}{c|c} & & & \\ &$$

CM 2

CRN 75-75-2 CMF C H4 O3 S

REFERENCE COUNT: THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT.

ANSWER 37 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1999:760843 CAPLUS

DOCUMENT NUMBER:

132:151768

TITLE:

Synthesis and molluscicidal activity of some new

thieno[2,3-d]pyrimidinones and their related

derivatives

AUTHOR (S):

Hosni, Hanaa M.

CORPORATE SOURCE:

Pesticide Chem. Dept., National Research centre,

Cairo, Egypt

SOURCE:

Egyptian Journal of Chemistry (1999), 42(5), 469-480

CODEN: EGJCA3; ISSN: 0449-2285

PUBLISHER:

National Information and Documentation Centre

DOCUMENT TYPE: Journal

LANGUAGE: English

Title compds. were prepd. from aminobithienylcarboxylate. The starting material and the thienopyrimidotriazole products showed excellent

molluscicidal activity against Biomphalaria alexandrina.

IT 257870-39-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); BIOL (Biological study); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and molluscicidal activity of some new thieno[2,3d]pyrimidinones and related compds.)

257870-39-6 CAPLUS RN

CN Thieno[2,3-d]pyrimidin-4(1H)-one, 2,3-dihydro-3-methyl-5-(2-thienyl)-2thioxo- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 38 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1999:659358 CAPLUS

DOCUMENT NUMBER:

131:286264

TITLE:

Preparation of phenylsulfonamide derivatives as

.proteinase and aggrecanase inhibitors

INVENTOR(S):

Kimura, Tomio; Miyazaki, Shoujiro; Ueda, Keiji;

Tanzawa, Kazuhiko; Ushiyama, Shigeru; Takasaki, Wataru

PATENT ASSIGNEE(S):

Sankyo Company, Limited, Japan PCT Int. Appl., 285 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

GI

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA'	TENT	KIND DATE APPLICATION NO.					DATE											
WO				A1 19991014				WO 1999-JP1751 19990402										
	W:		BR, US,		CN,	CZ,	HU,	ID,	IL	, I	N,	KR,	MX,	NO,	NZ,	PL,	PT,	RU,
	RW:	•	BE,		CY,	DE,	DK,	ES,	FI	, F	R,	GB,	GR,	IE,	IT,	LU,	MC,	NL,
CA	2327	290		A	A	1999	1014			CA	199	9-2	3272	90	1999	0402		
AU	9929	615		A:	1	1999	1025			ΑU	199	9-2	9615		1999	0402		
AU	7562	48		B	2	2003	0109											
JP	2000	3192	50	A:	2	2000	1121			JP	199	9-9	6827		1999	0402		
BR	9909	398		Α		2000	1226			BR	199	9-9	398		1999	0402		
EP	1069	110		A:	1 :	2001	0117			EP	199	9-9	1082	2	1999	0402		
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB	, G	R,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,																
NO	2000	0049	49	Α	;	2000:	1107			NO :	200	0-4	949		2000	1002	•	
PRIORIT	Y APP	LN.	INFO	. :					JP	199	8 - 9	181	9	Α	1998	0403		
								Ċ	JP	199	9-5	3164	4	A	1999	0301		
					•	•				199	9-J	P17!	51	W·	1999	0402		
OTHER SO	OURCE	(S):			MAR	PAT :	131:2	28626	54									

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. R5OR4SO2N(R3)CH(R2)COR1 [I; wherein R1 is H or NHOH; R2 is H, optionally substituted alkyl, cycloalkyl, or AR6 (wherein A is O, S(O)m, or alkylene optionally interrupted by N(R9); and R6 is a group represented by Q, Q1, Q2 wherein X is O, S, N(R10), or C(R11)(R12); Y is O, CO, S(O)n, N(R10), or C(R11)(R12); R7 and R8 each is H, alkyl, COOH, optionally substituted alkyl, etc.; R9, R10, R11, and R12 each is H,

alkyl, etc.; and m and n each is 0 to 2); R3 is H, optionally substituted alkyl, optionally substituted cycloalkyl, optionally substituted alkenyl, or optionally substituted alkynyl; R4 is optionally substituted (hetero)arylene; and R5 is optionally substituted alkyl or optionally substituted (hetero)aryl], stereoisomers, pharmacol. acceptable salts, esters, or other derivs. thereof are prepd. and tested as matrix metalloproteinase-13 inhibitors and aggrecanase inhibitors. Thus, the title compd. II was prepd.

IT 246263-34-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of phenylsulfonamides as proteinase and aggrecanase inhibitors)

RN 246263-34-3 CAPLUS

Thieno[2,3-d]pyrimidine-3(2H)-butanamide, 1,4-dihydro-N-hydroxy-5-methyl-alpha.-[methyl[(4-phenoxyphenyl)sulfonyl]amino]-2,4-dioxo-(9CI) (CA INDEX NAME)

RECORD. ALL CITATI

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 39 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1998:795022 CAPLUS

DOCUMENT NUMBER:

REFERENCE COUNT:

130:38396

TITLE:

CN

Preparation of thieno[2,3-d]pyrimidinediones in

treatment of reversible obstructive airways disease

INVENTOR(S): Cheshire, David; Cooke, Andrew; Cooper, Martin;

Donald, David; Furber, Mark; Perry, Matthew; Thorne,

Philip

PATENT ASSIGNEE(S):

Astra Pharmaceuticals Ltd., UK; Astra Aktiebolag

PCT Int. Appl., 117 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

English

FAMILY ACC. NUM. COUNT: 1

PAT	CENT :	NO.		KI	ND	DATE			A	PPLI	CATI	ON NO	ο.	DATE					
WO 9854190			A	1	1998	1203		WO 1998-SE935 19980518											
	W:	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,		
		DK,	EE,	ES,	FI,	GB,	GE,	GH,	GM,	GW,	HU,	ID,	IL,	IS,	JP,	KE,	KG,		
		ΚP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,		
		ÑŪ,	ÑΖ,	ΡĿ,	PT,	RŪ,	Rΰ,	SD,	SE,	SG,	SI,	SK,	SL,	ΤJ,	TM,	TR,	TT,		
														MD,					
	RW:	GH,	GM,	KE,	LS,	MW,	SD,	SZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,	DK,	ES,		
		FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,		
		CM,	GΑ,	GN,	ML,	MR,	ΝE,	SN,	TD,	TG			•						
ΑU	9876	808		A:	1	1998	1230		A	J 19	98-70	808		19980	0518				
ΑU	7237	80	B2 20000907																
EP	9916	53		A:	1	2000	0412		E	P 199	98-92	2470	5	19980	0518				
EP	9916	53		B	1	2002:	1016												

	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU	, NL,	SE,	MC,	PT,
		•	•	-		FI,		,				•		•	•	•	. '
EE	9900	539		A		2000	0615		E	E 19	99-5	39	_	1998	0518		
EE	4018			B	1 :	2003	0415										
BR	9809	481		Α		2000	0620		B	R 19	98-9	481		1998	0518		
JP	2002	5006	66	T	2 :	2002	0108		J.	P 19	99-5	0056	5	1998	0518		
ΑT	2262	05		Ε		2002	1115		A'	Г 19	98-9	2470	5	1998	0518		
ES	2184	270		T	3	2003	0401		E	3 19	98-9	2470	5	1998	0518		
US	6180	635		В:	1 :	2001	0130		U	S 19	98-1	1742	5	1998	0730		
MX	9910	911		A		2000	0430		M	X 19	99-1	0911		1999	1125		
NO	9905	810		Α		2000	0127		N	19	99-5	810		1999	1126		
US	6342	502		B	1 :	2002	0129		U	5 20	00-6	9389	5	2000	1023		
US	6469	014 .		B :	1 :	2002	1022		U	S 20	01-9	7794	4	2001	1017		
US	2002	1833	37	A:	1 :	2002	1205										
PRIORIT	Y APP	LN.	INFO	. :				5	SE 1:	997-	2001		Α	1997	0528		
								1	WO 1	998-	SE93	5	. W	1998	0518		
								Ţ	JS 1:	998-	1174	26	A 1	1998	0730		
								Į	JS 2	000-	6938	96	A1	2000	1023		

OTHER SOURCE(S): GI

CASREACT 130:38396; MARPAT 130:38396

$$\begin{array}{c|c}
C & XR^3 \\
R^2N & S
\end{array}$$

AB Title compds. [I; R is arylcarbonyl, aryl, arylalkyl; R1 and R2 are independently H, alkyl, alkenyl, cycloalkyl; X represents S(O)n, COO, NHCOO, etc.; R3 is Ph, pyridyl, CN, CO2H, SO2NH2, etc.; n is 0, 1, 2], stereoisomers, a pharmaceutically-acceptable salt or solvate are prepd. via cyclization and oxidn. processes. Title compds. were useful in the (prophylactic) treatment of autoimmune, inflammatory, proliferative and hyperproliferative diseases and immunol.-mediated diseases including rejection of transplanted organs or tissues and Acquired Immunodeficiency Syndrome (AIDS).

IT 216685-02-8P

CN

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(prepn. of thienopyrimidinediones in treatment of reversible obstructive airway disease)

RN 216685-02-8 CAPLUS

Thieno[2,3-d]pyrimidine-2,4(1H,3H)-dione, 3-methyl-1-(2-methylpropyl)-6-(1-naphthalenylmethyl)- (9CI) (CA INDEX NAME)

REFERENCE COUNT: THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 40 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1998:764730 CAPLUS

DOCUMENT NUMBER:

130:119563

TITLE:

7-Deazaxanthine, a novel prototype inhibitor of

thymidine phosphorylase

AUTHOR(S):

Balzarini, Jan; Gamboa, Antonio Esteban; Esnouf, Robert; Liekens, Sandra; Neyts, Johan; De Clercq, Erik; Camarasa, Maria-Jose; Perez-Perez, Maria-Jesus

CORPORATE SOURCE:

Rega Institute for Medical Research, K.U. Leuven,

Louvain, B-3000, Belg.

SOURCE:

FEBS Letters (1998), 438(1,2), 91-95

CODEN: FEBLAL; ISSN: 0014-5793

PUBLISHER:

Elsevier Science B.V.

DOCUMENT TYPE:

Journal

LANGUAGE: English

7-Deazaxanthine (7DX) was identified as a novel inhibitor of thymidine (dThd) phosphorylase (TPase). It inhibited the TPase reaction in a concn.-dependent manner. At 1 mM, it almost completely prevented the TPase-catalyzed hydrolysis of dThd to thymine. The 50% inhibitory concn. (IC50) of 7DX was 40 .mu.M in the presence of 100 .mu.M of the natural substrate dThd. 7DX is also endowed with a marked inhibitory effect on angiogenesis. It significantly prevents neovascularization in the chicken chorioallantoic membrane during development. 7DX is the first purine deriv. shown to be a potent inhibitor of purified TPase and angiogenesis.

IT 39929-79-8, 7-Deazaxanthine

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(7-deazaxanthine prototype inhibitor of thymidine phosphorylase)

RN 39929-79-8 CAPLUS

1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione (9CI) (CA INDEX NAME) CN

REFERENCE COUNT:

THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

20